Are Local Government Authorities in Australia Reporting on Sustainability?

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This thesis contains no material which has been accepted for a degree or diploma by the University or any other institution, except by way of background information and duly acknowledged in the thesis, and to the best of the my knowledge and belief no material previously published or written by another person except where due acknowledgement is made in the text of the thesis, nor does the thesis contain any material that infringes copyright.

Belinda Rachael Williams

01 July 2011

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STATEMENT OF ETHICAL CONDUCT

The research associated with this thesis abides by the international and Australian codes on human and animal experimentation, the guidelines by the Australian Government's Office of the Gene Technology Regulator and the rulings of the Safety, Ethics and Institutional Biosafety Committees of the University.

Belinda Rachael Williams

01 July 2011

DEDICATION

This thesis is lovingly dedicated to my parents, Eric and Barbara Gutwein.

Thank you Mum and Dad.

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The writing of this thesis has been assisted by the generous help of a number of people and I wish to take the opportunity now to name and thank them for all their help over the last three or so years. First and foremost, I am indebted to my two supervisors, Associate Professor Trevor Wilmshurst and Professor Robert Clift. They have provided support at every stage of this thesis. Without their comments, advice and patience, this thesis would never have been completed. Thank you.

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ABSTRACT

Ball (2004a) in describing the up-take of sustainability reporting in the public sector suggests that it is 'seemingly patchy' whilst Tort *et al.* (2010) and Dickenson *et al.* (2005) described it as an emerging field in its infancy approached on an ad hoc basis. This study contributes to the debate by examining sustainability reporting within the public sector specifically focused on local government authorities in Australia.

Reporting by these authorities on sustainability is examined from a communication theory perspective. The study looks at the key factors in establishing sustainability reporting, the use of accountants in this process and the types of reporting frameworks that are being used. Finally, a broad reporting framework is developed specific to local government intended to act as a guide in the advancement of the sustainability reporting agenda in the sector.

A triangulated approach was adopted for this study utilizing mail survey and interview techniques. Subjects for the mail survey were chief financial officers (CFOs) of all local government authorities in Australia. One hundred and ninety usable responses were returned, providing a usable response rate of 35.51%. To supplement and enrich the data provided by the mail survey, twenty-two interviews across sixteen organizations were then conducted.

The results indicate that local government authorities in Australia are reporting on sustainability. Such reporting appears, though, to be inconsistent in focus and in location of the reported information. Further, significant differences were found in reporting levels between urban and rural local authorities. Key leadership support and stakeholder engagement were found to be the two key factors driving the establishment of sustainability reporting in local government in Australia. The results indicate that accountants play a role in the sustainability reporting process though in a limited capacity. Finally, a number of reporting frameworks are being utilized by local government authorities with the expected framework, the GRI guidelines, being utilized by few.

A number of areas for further research were highlighted including the potential effects of mandatory reporting requirements on local government sustainability reporting practices, the exploration of the significant occurrence of social reporting highlighted in this study and research that examines restraints on sustainability reporting. In doing so, such research will assist in the further development of a more coherent knowledge and understanding of sustainability reporting in the local government sector.

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Chapter 1 Introduction

1.1 Introduction

Few concepts today appear to have captured the public and political imagination more than that of 'sustainable development'. The emergence of this concept has lead to a groundswell in sustainable development activity, an outpouring of academic and professional literature and the wide embracement of the term within both the political and social arena.

Sustainable development is essentially the recognition that global problems of environmental degradation and the socio-economic issues tied up in poverty and inequality are unsustainable in the long-term. It has the potential to address fundamental challenges for humanity, now and into the future (Hopwood *et al.* 2005). Whilst there are numerous thoughts and approaches on how sustainable development can be achieved, one approach that has emerged as a potential means to progress the sustainable development agenda has been the contribution of accounting through sustainability reporting techniques (Ball and Bebbington 2008; Unerman *et al.* 2007).

This form of accounting and reporting has been taken up by the private sector, with it even being considered that this is now a part of mainstream business reporting (KPMG 2008; Epstein 2008). In comparison, progress by public sector organizations is seemingly patchy and is seen as an emerging field (Tort 2010; Dickinson *et al.* 2005; Ball 2004a and b). Nevertheless, with approximately 40% of all economic activity being accounted for by the public sector (Ball and Grubnic 2007), the public sector can be expected to 'walk the talk' on sustainability, through leading by example in reporting publicly and transparently on their activities to promote sustainability (Ball 2006a).

One such level within the public sector that has been emphasized is the local government sector with Ball (2002) highlighting that it is becoming increasingly apparent that the sustainable development agenda needs to be applied and driven at the local community level if sustainability goals are to be achieved. Local government is at the grass roots level; it is in a key position to advance and/or commence the sustainable development

agenda through its activities and reporting on these activities through sustainability reporting. This study considers sustainability reporting in the Australian public sector specifically focusing on local government.

1.2 Background to this Study

The concept of sustainable development is not new. The origins of the concept can be traced back to the agricultural, forestry and fisheries industries in the eighteenth and nineteenth centuries (Lamberton 1998; Kula 1994). However, recent business and community focus on the concept would appear to have evolved from the release of 'Our Common Future' in 1987, that is, The Brundtland Report. The report provided a definition of sustainable development, which has become one of the most widely adopted definitions for sustainable development utilized today; '*development which meets the needs of the present without compromising the ability of future generations to meet their own needs*' (World Commission on Environment and Development 1987 p. 8).

This definition whilst general in nature provides a global perspective on sustainable development by encompassing the three fundamental components that are deemed as critical to the progression of sustainable development for both today's generation and future generations: environmental protection, economic growth and social equity.

The Brundtland definition has been seen as a critical marker – it initiated an explosion of work on sustainable development and sustainability through which we chart the course of sustainability thinking and practice today (Sneddon *et al.* 2006). However, it is not the only definition of sustainable development – it has been estimated that there are over 300 varying definitions that have been coined (Johnston *et al.* 2007) with tremendous diversity in the definitions and interpretations (Hopwood *et al.* 2005; Giddings *et al.* 2002). Further, the use of such a generalized definition has led to numerous researchers questioning the specifics of the concept and have even labeled it as a 'confusing', 'vague', 'unknowable' term and an 'oxymoron'[1].

There have also been various concerns and criticisms of the Brundtland definition, with

[1] See Jabareen 2008 for an overview.

one such criticism highlighting the need to move the term from a theoretical concept to an operational concept. Whilst there is no general agreement on how the concept should be translated into practice (Berke and Conroy 2000), it has become increasingly recognized that local government has a key role to play if the sustainable development agenda is to be pursued. Local government, with strong links to local communities, is in a key position to foster a bottom-up approach to regional and national development in the pursuit of sustainable development.

One potential tool for progressing sustainable development is through sustainability reporting – that is, reporting on an organization's contribution to sustainable development. Whilst the private sector has dominated the development of sustainability reporting through such reporting approaches as triple-bottom-line (TBL) reporting, such reporting is not without its critics. In light of the numerous criticisms brought against TBL reporting, as Ball (2006a, 2004a) argues, whilst much can be gleaned from the private sector's experience, the public sector have an opportunity today to develop their own sustainability reporting framework specifically tailored to their own objectives and environment.

Further, with there being a current lack of a co-ordinated reporting structure on sustainability reporting at the public sector level (Lamprinidi and Kubo 2008), local government is in a key position today to develop a reporting approach to sustainability that would provide for comparability and transparency whilst providing a structure that is specific and adaptable to the needs and issues faced by individual local authorities.

1.3 Research Questions

Although there has been progress in recent years into research in public sector accounting, there is room for improvement. This has been emphasized by a number of recent studies including Broadbent and Guthrie (2008) who argued that there has been an over-reliance on normative theorizing and stressed the need to develop a more coherent body of knowledge and understanding embedded in empirical understandings for this research to impact on society. Ball and Grubnic (2007) highlighted the need from a public sector perspective for contributions of a fundamental nature leading to the

development of principles and practice suited to sustainability accounting and accountability. Further, Ball (2004a) highlighted the need for further research to reveal what proportion of public service organizations are actually engaged in sustainability reporting and the implications for delivering on sustainability whilst Guthrie *et al.* (2010) highlighted the neglect by scholars and others of theoretical research and in-depth investigations of sustainability practice in public services.

This exploratory study responds to these calls for research contributions of a practical and fundamental nature by asking the research question – 'Are local government authorities in Australia reporting on sustainability?'. In doing so, this study will contribute towards an understanding of sustainability reporting within the public sector with a specific focus on local government and will add to the further development of theoretical underpinnings within the public sector as a whole, which is currently lacking in research literature (Lodhia 2010).

To consider the question of sustainability reporting in Australian local government, the following research questions are posed.

1 To what extent are sustainability activities being reported by local government authorities?

This question will determine if local governments are reporting on sustainability. It is anticipated that whilst reporting may be at a minimum, local governments do, in fact, report on sustainability. It is further expected that there will be a lack of consistency in the choice of reporting media used to report this information and that local governments are being selective in what they report with an anticipated focus on environmental sustainability reporting.

2 Are there differences in the level of sustainability reporting between urban and rural local government authorities?

This question will determine if there are any differences in reporting by urban and rural local governments. It is anticipated that rural authorities will be less likely to be engaging

in sustainability reporting.

3 What are the key factors leading to the adoption of sustainability reporting within local government authorities?

It is anticipated that there will be two key factors driving the establishment of sustainability reporting within local government authorities. The primary internal factor is expected to be key leadership support, whilst the primary external factor is expected to be stakeholder engagement.

4 Are accountants being utilized in sustainability reporting in local government authorities?

This question will examine the involvement of accountants in sustainability reporting within local government. It is anticipated that accountants will have a minimal level of involvement in the sustainability reporting process.

5 What sustainability frameworks are currently being adopted by local government authorities?

It is anticipated that the dominant reporting framework being utilized by local government will be the GRI framework. However, it is also expected that the application of the framework will be utilized in a fragmentary manner with no consistent core of reporting elements being utilized. It is expected a possible reason for this is that the GRI framework is not specific to the local government sector in Australia. Furthermore, it is anticipated that there will be no consistent definition of sustainable development being utilized in sustainability reporting in local government authorities.

1.4 Contribution of this Study

This thesis fills a gap in the literature by providing an understanding of sustainability reporting in the public sector with a specific focus on local government in Australia. It will contribute towards this research gap by identifying the extent to which local governments in Australia are reporting on sustainability by viewing reporting from a

communication theory perspective. The study will also provide additional evidence about what the key factors are in establishing sustainability reporting, the use of accountants in this reporting process and the types of reporting framework that are being used by local governments in Australia. In doing so, this study will contribute towards an understanding of the communication process and the further development of sustainability reporting by the construction of a broad reporting framework for local government.

1.5 Research Methods

This study is undertaken by adopting a triangulated approach, collecting both mail survey and interview data from a selection of respondents. The use of multiple methods of research is advocated by a number of researchers as it allows for a more complete, holistic picture to be shown because it can uncover unique variances which otherwise may have been missed by the use of a single research method (Jick 1979 p. 603; Smith 1975; Denzin 1970; Webb *et al.* 1966).

Subjects for the mail survey were the chief financial officers (CFOs) of all local government authorities in Australia, which currently total 566 (Department of Infrastructure, Transport, Regional Development and Local Government 2009). The mail survey was sent to a total of 536[2] potential respondents in March 2009. One hundred and ninety usable responses were returned, representing a usable response rate of 35.51%.

To provide support and elaboration of data provided by mail survey respondents, a number of in-depth interviews were conducted. Interview subjects were drawn from two categories within the Australian Classification of Local Governments (ACLG), one from the urban categorization being 'urban regional' and the other from the rural categorization being 'agricultural'. By selecting these two categories, it allowed for an in-depth comparison of the extent of sustainability reporting across similar sized authorities but also allowed for analysis to be conducted between categories. Purposeful sampling was further utilized (Patton, 1990) to provide for in-depth comparisons across states by focusing on four states, being New South Wales (NSW), Victoria, Queensland

[2] Representing the total number of local authorities (566) in Australia less thirty authorities included in the formal pilot survey.

and Tasmania, which resulted in a total sample size of 180.

The invitation letter for interview was sent to potential interviewees in October 2009. This resulted in twenty-two interviews being conducted across sixteen organizations during the period November 2009 - February 2010. All interviews were conducted face-to-face at each respective local authority with the exception of one, which was conducted by telephone. Semi-structured interview techniques were utilized for this study which allowed for structure and direction during the interview but also flexibility to ask related, unanticipated questions, thus enhancing the study's findings (Hair *et al.* 2003).

1.6 Overview of this Study

This thesis consists of nine chapters as follows.

Chapter 1 (Introduction) provides a general introduction to the study. It provides the background to the research which leads to the research questions to be examined in this study. It further provides the contribution of the study, the research methods adopted and the structure and organization of this study are outlined.

Chapter 2 (Local Government and Sustainable Development) examines the public sector with specific focus on local government. It defines key terms and definitions used in this study and provides an overview of accounting for sustainability. It further discusses sustainability reporting in the public sector, why such reporting needs to be different from the private sector approach and initial considerations of why such reporting has not yet been advanced in the local government sector.

Chapter 3 (A Framework for the Local Government Sector) explores the need for a common reporting framework in local government and examines the available frameworks that guide the sustainability agenda including specific frameworks that target the public sector. From these frameworks, possible contributions towards the development of a reporting framework for local government are identified and discussed.

Chapter 4 (Sustainability Research in the Local Government Sector) develops the five specific research questions for this study. These questions are developed from a review

of the literature from which eleven hypotheses are subsequently posed.

Chapter 5 (Research Methodology) covers the specific data collection and analysis techniques used in the investigation. The study incorporates a triangulated approach utilizing mail survey and interview techniques.

In Chapters 6 and 7 (Results Chapter – Mail Survey), the results of the mail survey in relation to each of the five research questions are discussed. The discussion is divided into three main sections. The first section describes the data collection process whilst the second section details the descriptive analysis of the survey responses. The third section provides the analysis that was conducted in relation to the five research questions, which is discussed over the two chapters.

Chapter 8 (Results Chapter – Interviews) discusses the results of the interviews. The chapter includes a discussion of the interview process, descriptive interview data and an analysis of the data in terms of the five research questions posed.

Chapter 9 (Discussion and Conclusion) provides an examination of the key findings from this study in relation to each of the five research questions posed. Implications of the study are also discussed including the initial development of a sustainability reporting framework for local government. This is followed by a discussion of the limitations of the study. Finally, directions and opportunities for future research are discussed.

1.7 Summary

This chapter outlined the composition of this study. It has introduced the study and discussed the research questions to be examined. Given limited research in the public sector on sustainability reporting, the contribution of the study is discussed highlighting the significance of the study in providing an understanding of sustainability reporting in the public sector, with specific focus on the local government sector. In addition, the research methods are provided along with an overview of the study. In the next chapter the public sector is examined, key terms and definitions are defined and an overview of accounting and reporting for sustainability will be undertaken.

Chapter 2 Local Government and Sustainable Development

2.1 Introduction

In this chapter the public sector in Australia is examined with particular reference to local government and sustainability reporting. Sustainability accounting and reporting and other key terms to be used within this study are also discussed.

2.2 The Public Sector

Internationally, the public sector accounts for approximately 40% of all economic activity (Ball and Grubnic 2007) and is an integral component of society. It represents that component of the economy that is traditionally owned and controlled by government (Broadbent and Guthrie 1992) which deals with the production, delivery and allocation of goods and services to the community.

There are three levels within the public sector in Australia – Federal, State and local government. In Australia, local government historically has been seen as the 'Cinderella' (Finn 1990), the poor relation of government. From the outset, local government has lacked prestige – this is in part because of their lack of financial independence, their part-time tenure and their limited powers under state legislation (Kupke 1996). The Australian situation is somewhat different from a number of its international counterparts. For example, Canada and the United Kingdom have had historically stronger and more prestigious systems of local government, in terms of a broader range of services being provided and stronger constitutional and economic power bases with higher levels of financial control (Mercer and Jotkowitz 2000). Reinforcing this argument, in a comparative survey of local government in fifteen countries in the Asia-Pacific region (Economic and Social Commission for Asia and the Pacific (ESCAP) 1999), local government in Australia was described as;

> *'…the Commonwealth collects and holds all the money, the states hold all the power and local government is left with the problems'* (p. 14).

Whilst local government may lack prestige and have limited powers to that existing at other levels of government, local government does play an important role (Dollery *et al.* 2006). Further**,** the services that local government provides are some of those which most immediately and intimately affect the well-being of citizens (Corbett 1996). Local government in Australia is now examined.

2.2.1 Local Government in Australia

Local government is that form of government that is at the local community level. It takes responsibility for services that are of local interest within the community. Local government has a variety of titles in Australia – shires, municipalities, cities, district councils, regional councils. There are 566 local government bodies in Australia (Department of Infrastructure, Transport, Regional Development and Local Government 2009) each representing its individual metropolitan, regional and/or rural community.

The local government sector plays a small but important role in Australia's economy today. Its expenditure was approximately $10.1 billion in 2007-2008 representing 0.9% of gross domestic product (GDP) and employing approximately 171,000 people nationally. As at 30 June 2008, local government in Australia had a net worth of $248,742 million, with assets of $261,575 million and liabilities of $12,833 million with assets increasing by 14.5% from the previous financial year. It is further responsible for infrastructure worth more than $244 billion in land and fixed assets including approximately 80% of Australia's roads (Department of Infrastructure, Transport, Regional Development and Local Government 2010).

Local government is responsible for a number of key functions within our local community.

2.2.2 What are the Functions of Local Government?

Over the past thirty years, the functions and responsibilities undertaken by the local government sector in Australia have gradually increased. This has been due to a number of factors including State and Commonwealth government inducements, community pressure and withdrawal of services by other levels of government. Council services now

generally include a range of social and human services in addition to the physical infrastructure of roads and waste (Dollery *et al.* 2006).

Individual local authorities determine service provisions according to their local needs and the requirements of the various state local government Acts. Whilst there may be some variation in functions and responsibilities from State to State, broadly speaking local government authorities perform similar roles involving governance, service delivery, advocacy, asset management, planning, community development and regulation.

Typical examples of local government functions and services include:

- engineering (public works design, construction and maintenance of roads, bridges, footpaths, drainage, cleaning, waste collection and management);
- recreation (golf courses, swimming pools, sports courts, recreation centres, halls, kiosks, camping grounds and caravan parks);
- health (water sampling, food sampling, immunization, toilets, noise control, meat inspection and animal control);
- community services (child care, elderly and accommodation, refuge facilities, meals on wheels, counselling and welfare);
- building (inspection, licensing, certification and enforcement);
- planning and development approval;
- administration (of aerodromes, quarries, cemeteries, parking stations and street parking);
- cultural/educational (libraries, art galleries and museums);
- water and sewerage (in some areas); and
- other (abattoirs, sale-yards, markets and group purchasing schemes)

  (Department of Infrastructure, Transport, Regional Development and Local Government 2010).

Local government is at the coal face – the services and functions they provide are at the community level. It has strong established links to the community and is accountable to the community that it represents. Local governments also have well developed links with local businesses and industry and the decisions that they make may directly affect the economic, social and environmental well-being of their communities. This places local government in a position to foster a bottom-up approach to regional and national development[1].

Today, one issue that is being pushed to the forefront of the Australian political and social arena is the pursuit of the sustainable development agenda. Local governments are stewards of the local environment; they can offer social, environmental and community services capable of addressing different dimensions of the sustainable development agenda (Ball and Craig 2010). They are viewed as one of the potential major players in the effort towards sustainable development (Ball 2004a). An opportunity exists, therefore, for local governments to take the lead and guide the development of this agenda through using a 'bottom-up approach'. In the next section, key terms of this study are examined.

2.3 Key Terms and Definitions

Key terms that underpin this research are now discussed, commencing with an examination of the term 'sustainable development'.

2.3.1 Sustainable Development

The concept of 'sustainable development' is not new. It is reported that this concept was applied to agriculture in the eighteenth century, forestry in the nineteenth century and to fisheries in the 1950's (Lamberton 1998; Kula 1994). However, the true birthing of this concept was left until the 1970's, which brought with it a new global consciousness about problems related to the environment and development (Wheeler 1998). Wheeler considered that the catalysts for change in 'global consciousness' included such events as the rise of ecological problems and the '*1973 oil embargo during which millions of*

[1] As discussed in the Department of Transport and Regional Services Submission No. 103 (2003).

people suddenly realized that their fossil fuel use could not continue to expand forever' (p. 488).

One of the most widely adopted definitions for sustainable development utilized today appeared in 'Our Common Future', known as 'The Brundtland Report' in 1987 (The World Commission on Environment and Development (WCED)). This definition (referred to as the Brundtland definition after the Chair of the Commission, Gro Harlem Brundtland) was relatively general in nature offering a global perspective on sustainable development.

> *'Development which meets the needs of the present without compromising the ability of future generations to meet their own needs'* (p.8).

Within the report it was argued that a more holistic view of sustainable development was required if the sustainability[2] agenda were to be achieved. The report argued that this view should encompass three fundamental components: environmental protection, economic growth and social equity, and that these components needed to be integrated (WCED 1987 p.49). Further, the report argued that the model of development based on economic growth was unsustainable in the long term.

As discussed by Sneddon *et al.* (2006), the Brundtland definition has been a critical marker – it initiated an explosion of work on sustainable development and sustainability through which we chart the course of sustainability thinking and practice today. Whilst this definition is widely used, it has been estimated that there are over 300 varying definitions of sustainable development that have been coined (Johnston *et al.* 2007) with tremendous diversity in the definitions and interpretations (Hopwood *et al.* 2005; Giddings *et al.* 2002). What is clear is that the meaning of sustainable development still remains open to discussion with agreement not yet reached on exactly what the term means (Harding 2006; Bebbington 2001; Jacobs 1999) with researchers even considering the term as 'confusing' (Aras and Crowther 2009; Bebbington 2001; Redclift 1993a,

[2] The terms 'sustainability' and 'sustainable development' are often used interchangeably but they mean different things. Sustainability refers to the ultimate goal or destination whilst sustainable development is the pathway or framework followed to achieve it (Harding 2006).

1994), 'vague' (Robinson 2004; Mozaffar 2001; Mebatru 1998; Redclift 1993b) 'unknowable' (Milne *et al.* 2008) and an 'oxymoron' (Redclift 2005).

Whilst the Brundtland definition has its strengths, which include the bringing to the global forefront the important linkage between the environment and development and the stimulation of a vast amount of work on sustainable development (Jacob 1994), various concerns and criticisms have been made of this definition.

Such criticisms include Schmuck and Schultz (2002) who argued that a limitation of the definition includes the focus of the term 'needs'– that is, 'needs of the present' and 'future generations to meet their own needs'. The term 'needs', in the context of the Brundtland definition refers specifically to humans and human needs (WCED 1987 p. 46) with the exclusion of environmental needs (Redclift 2005). This was further considered by McCloskey (1999) when he stated '*there is also the question of meeting the needs of other living things and affording them living space*' (p.155). Whilst it could be concluded that in meeting the needs of humans, environmental needs may also be met to some extent, the focus of the Brundtland definition clearly emphasizes one main type of need, human, rather than focusing cross-sectionally across all needs, whether human or not.

With the focus of the definition towards human needs, development arguably is geared towards meeting these needs. As acknowledged by McCloskey (1999), the term is committed to harnessing the environment to meeting human needs and growth. The definition further does not provide any specifics as to what actually is a 'need' but rather is broad and open (Mannberg and Wihlborg 2008; Redclift 1993a and b). The definition does not state what 'needs' are to be included and what 'needs' are to be excluded. As considered by Schmuch and Schultz (2002) the basic biological needs of water, food and reproduction would have to be included but what about non-essential or luxury 'needs' and what about 'needs' that are specific to certain cultures and societies? Beckerman (1994) in discussing this point, stated:

> *'..people at different points in time, or in different income levels, or with different cultural or national backgrounds, will differ with respect to what 'needs' they regard as important'* (p. 194).

This was further highlighted by Doyal and Gough (1991) who point out that 'needs' mean different things to different people A further criticism of the definition encompasses the changing of needs over time. Each society defines needs in its own way and, over time, these needs change. Therefore, as needs change over time, it is unlikely that the needs of future generations will be the same as those of the present generation (Redclift 2005, 1993a and b).

With the usage of such a definition, how can the needs of future generations not be compromised when the present generation is concerned with meeting their own needs? From the outset, however, the Brundtland definition purposely was not made specific. It was made general in order to offer a global perspective on sustainable development and to allow it to mean different things to different people, cultures and societies. If specific needs had been quantified in the definition from the outset, the needs of today's generation would probably be quite different from when the definition was formulated in 1987. This was considered by Redclift (2005) who highlighted that needs change over time. The definition was formulated to ensure that it encompassed the needs of this generation and future generations, whatever those needs may be.

With the use of such a generalized definition of sustainable development, Holden and Linnerud (2007) considered that it has brought with it a level of vagueness which has caused some to dismiss the concept altogether whilst Springett (2003) argued that the term can be made to mean what one would like it to mean. Concerns about the definition have resulted in many attempts to redefine the term. Jabareen (2008, 2004), Connelly (2007), Hopwood *et al.* (2005), Robinson (2004), Pezzoli (1997a and b) and Gladwin *et al.* (1995) provide overviews of these attempts in their respective studies. Other researchers have highlighted the implications of concerns raised. Berke and Conroy (2000) noted that there is no general agreement on how the concept should be translated into practice. McCloskey (1999) stated that it is not an operational concept whilst Buhr (2007 p. 57) considered sustainable development to be '*a tricky piece of work*' to put into practice. Bell and Morse (2001) provide perhaps the more colourful analogy, in describing the term:

> '*Sustainable development has become something of a holy grail in modern times, similar to the Yeti or Loch Ness Monster, there have been many claims of sightings but verification has been hard to come by*' (p. 292).

However, as Byrch *et al.* (2007) argue, a definition of sustainable development describes how things should be based on the fundamental beliefs of the individual defining the term and it can be nothing more because as Dryzek (1997) points out '*sustainable development is not proven or demonstrated, but rather asserted'(*p.123). Other researchers have considered that providing such a loose concept could easily allow businesses and governments to be in favour of sustainability without any fundamental change to their present course by pursuing Brundtland's support of economic growth as sustainable growth (Hopwood *et al.* 2005 p. 40; Springett 2003 p. 82; Jacobs 1999). However, as was considered by Robinson (2004), there can be some advantages in leaving the term open to what is actually meant because attempting to provide a precise definition has had the effect of excluding those whose views do not fit that definition. Ball (2004a) further considered that it may not be possible to agree on a common definition because ideas differ between different communities and societies. Robinson (2004) argued that leaving the definition open and imprecise would allow for the emergence of a more precise definition from practical attempts at implementing sustainable development, rather than having definitional rigour imposed from the outset. Perhaps this may be the more appropriate approach for the development of this term –sustainable development may need to be put into action in organizations which will allow for the gradual evolvement over time of a more precise and definite term.

2.3.2 Sustainable Development at the Local Government Level

While there has been significant discussion at international, national and state level as to how sustainable development can best be achieved and the implications of any approach adopted, it is increasingly recognized that the sustainable development agenda needs to be driven at the local community level if it is to be effective (Ball 2002). As such, with their proximity to the local community, local government authorities have been recognized as primary agents in contributing towards sustainable development (Ball

2004a). Although the Brundtland definition has dominated the world view of sustainable development due to its global perspective, this is not an appropriate definition to utilize at the local community level. Roosa (2008) argued that whilst sustainability might be a global ideal, to think globally is irrational; rather the way to affect change is to think and act locally. By focusing on sustainability at the local community level, local government authorities can directly change the economic, social and environmental outcomes of their individual communities. Thus, if local authorities each took up the sustainable development agenda; in doing so, this can collectively impact on sustainability at a broad global level.

At the local level what is needed is a definition to operationalise the broad, general view of sustainable development identified by the Brundtland Report. Whilst it has been previously argued that the term perhaps should be left open to allow for its gradual evolvement, Page and Proops (2003) argued that such defining is important as it provides a foundation for policy articulation and formulation.

> *'Theories, ideas and concepts matter, and they matter a great deal. They are not only the foundations on which we build our perceptions and 'constructions' of the world, they also are the basis for policy articulation and formulation. Poor concepts and poor theories lead to poor understanding and poor policies…'* (p. 3).

Further, Byrch *et al.* (2007) concluded that there is a risk of not ever being able to achieve sustainable development if we cannot agree on what it is whilst Hilden and Rosenstrom (2008) considered the fuzzy concept has to be refined before it can be used. In following this pathway as highlighted by Gray (2010) there is the risk that the term 'sustainability' may enter common discourse and become largely trivialized. While Schaltegger and Burritt (2009, 2006) have argued that the term has become a buzzword largely to 'greenwash' activities by corporations.

To undertake theoretical development of sustainable development at the local government level an initial commencement point needs to be firmly established. The

next section commences this process by defining sustainable development from the local government perspective.

2.3.3 A New Definition of Sustainable Development

The services and functions that are provided by local government authorities are at the community level. They deal directly with local householders, businesses and industry within their communities. As such, sustainable development at the local authority level should be established by reference to the community and the activities undertaken within a community encompassing the three fundamental components of sustainability development: environmental protection, social equity and economic growth.

Such an approach to sustainable development needs, as a bare minimum, to maintain the current levels of environmental protection, social protection and economic growth within the community and, where possible, to improve. Such an approach is similar to that of Pearce and Warford (1993) who interpreted sustainable development as the requirement to maintain, possibly to improve but not to let decline. However, Pearce and Warfords' approach was focused towards economic sustainable development in terms of human welfare. To achieve sustainable development, the focus of sustainable development needs to extend beyond just economic sustainable development to consider the environmental and social spheres of which are considered critical to the progression of sustainable development. In doing so, this would provide for the progression of environmental protection, social protection and economic growth for both today's generation and future generations. Thus, sustainable development at the local government level is defined as follows[3]:

> *'Sustainable development is development at the local community level which seeks to maintain, integrate and where possible, improve environmental protection, social equity and economic growth within the community'.*

[3] For the purposes of this study, this definition of sustainable development will be adopted and utilized.

Agenda 21 has been argued to be a key catalyst in commencing the sustainable development agenda in local authorities (Tanguay *et al.* 2010; Keen *et al.* 2006; Ball 2004a; Neil *et al.* 2002; Cotter and Hannan 1999). Agenda 21 will now be reviewed.

2.3.4 Agenda 21

In 1992, as a direct result of the United Nations Conference on Environment and Development (UNCED), an action plan for sustainable development was released called 'Agenda 21'. Agenda 21 is a comprehensive blueprint that sets out actions that can be taken at the global, national and local levels to contribute to global sustainable development.

Agenda 21 called upon local governments around the world to take a course of action to implement that blueprint. As stated in Agenda 21:

> *'Because so many problems and solutions being addressed by Agenda 21 have their roots in local activities, the participation and cooperation of local authorities will be a determining factor in fulfilling its objectives. Local authorities construct, operate and maintain economic, social and environmental infrastructure, oversee planning processes, establish local environmental policies and regulations, and assist in implementing national and sub-national environmental policies. As the level of governance closest to the people, they play a vital role in educating, mobilizing and responding to the public to promote sustainable development'* (Chapter 28 paragraph 28.1).

Local government is of central importance today in the pursuit of global sustainability (Ball 2004a; Christie 2000; Brown 1997). Of the actions identified in Agenda 21 that would need to change to move towards sustainability, many require active involvement by local authorities. Mercer and Jotkowicz (2000) considered it to be two-thirds of all actions whilst Christie (2000) considered it to be approximately half the actions identified in Agenda 21 that require local government involvement.

Local Agenda 21 (LA21) was developed to focus on implementing sustainable development at the local government level with the establishment of a national LA21

program in 1997. It was anticipated that key outcomes from a national program would include an integrated decision-making model taking into account all foreseeable economic, social and environmental considerations, the establishment of long-term, integrated action plans and continual improvement changes towards sustainable development (Cotter & Hannan 1999).

Whilst Australia's formal LA21 program was established in 1997, many local authorities had commenced and/or implemented programs prior to that date. The progress of Australian local authorities towards a LA21 process was examined by Whittaker (1997), as a result of a mail survey sent to 770 authorities by the Australian National Local Government Environment Association (Environs Australia). A total of 192 replies was received from local government authorities, representing a 25% response rate.

It was found that 121 respondents were working on some form of sustainability program though only thirty-four of these respondents were working on LA21 sustainability processes[4]. Whittaker (1997) noted that this area of research is fraught with difficulties because there is considerable ambiguity surrounding the form and content of LA21, thus many authorities had difficulty deciding whether they were developing LA21 sustainability processes or not. As a result, care in interpretation of the results is important.

It was further found by Whittaker (1997) that whilst local governments displayed a strong commitment to the environment, they were less inclined to the development of an overarching sustainability initiative to incorporate social and economic programmes. This was seen to be one of the shortcomings of the LA21 process - its emphasis was aimed towards environmental protection (Upton 2002) rather than on three separate but integrated components. Even with this shortcoming, LA21 has been and still is essential to the sustainable development process in Australia – by emphasizing the finite nature of the world's environmental resources and sustainable development issues, it has been a major player in the commencement of the sustainability agenda in local government.

[4] Other respondents were focusing on individual programs such as local conservation strategy programs.

With local government being at the grass roots level, it is in a key position today to lead by example towards the attainment of sustainable development, encompassing the three pillars, environmental protection, economic growth and social equity. Such a contribution can begin with accounting and reporting for sustainability (Keen *et al.* 2006; Neil *et al.* 2002).

2.4 Accounting and Reporting for Sustainability

Conventional financial accounting quantifies a business's worth in society by the value of the annual profit or loss that it makes. In applying conventional accounting and its associated techniques, very little thought is given to the social or environmental sphere in which businesses exist (Jones 2010; Schaltegger and Burritt 2009, 2006, 2000; Ball 2004a; Gray and Bebbington 2001, 2000; Lamberton 1998; Bebbington and Gray 1993; Gray 1992, 1990; Maunders and Burritt 1991; Hines 1991). In effect, it fails to recognize many of the social and environmental consequences associated with economic growth – such as environmental pollution, resource exhaustion and impacts on cultural and ethical values (Bloom and Heymann 1986).

Maunders and Burritt (1991) and Geno (1995) in examining a number of the fundamental assumptions of conventional financial accounting[5] found clear challenges between providing accounting information that conforms with these fundamental assumptions and their application to ecological issues. For example, Geno (1995) drew attention to the mismatch between an assumption that an entity's transactions should be measured in monetary terms whilst the process of accounting for sustainability includes valuations which are non-monetary.

In effect, conventional accounting is one-dimensional in that it focuses on the economic reality whilst largely ignoring the environmental and social dimensions in which businesses operate. Organizations do not operate in silos separate from their environment and social impact, rather they operate in highly complex systems (Gray *et al.* 1995). However, by utilizing conventional financial accounting and reporting systems, this may

[5] These assumptions include the going concern, accounting period, consistency, conservatism, entity, monetary, objectivity and materiality assumption.

be contributing to non-sustainability today through the disregard of environmental and social consequences (Ball 2004a; Gray and Bebbington 2001, 2000; Owen *et al.* 1997; Milne 1996; Gray *et al.* 1993; Adams 1992; Gray 1992; Cooper 1992; Maunders and Burritt 1991).

A further concern of conventional financial accounting is its short-term focus. Time horizons underlying the preparation of financial statements are usually short based around financial year cycles and the resulting statements report on past transaction data. One of the important factors in accounting for the social and environmental sphere is to look forward and long term to the attainment of sustainability (Milne 1996; Geno 1995; Batley and Tozer 1993). Maunders and Burritt (1991) note that longer-term impacts of current activities are imperfectly represented in conventional financial accounting due to the short-range focus taken. Gray *et al.* (1998) believed there was a need for development of new accounting and accounting methods to address these issues.

> '*the increasing concern with stakeholders, growing anxiety about business ethics and corporate social responsibilities, ... and the increasing importance of ethical investment have all raised the need for new accounting and accounting methods through which organizations and their participants can address such matters'* (pp. 203-204).

By organizations addressing their economic, social and environmental impacts through the development of sustainability accounting and reporting methodologies, this could potentially provide for a more holistic viewpoint of the settings in which organizations operate (Lamberton 1998) and be a potential tool for progressing the sustainable development agenda within organizations (Ball and Bebbington 2008; Unerman *et al.* 2007; CIPFA 2006; Ball 2004a; Gray 2000).

There has been a number of studies that have explored and/or categorized available approaches in an effort to advance accounting for sustainability and incorporate the social and environmental sphere into accounting; see, for example, Gray (2010, 2006a, 1994, 1992, 1990), Bebbington and Gray (2001) and Milne (1996). In Schaltegger and Burritt (2009, 2006) and Burritt and Schaltegger (2010), it was considered that two dominant

lines of thought are becoming evident; first, an entirely new system of accounting for sustainability designed to promote a strategy of sustainability (the critical perspective), and second, an extension or modification to conventional financial accounting (the management perspective). The leading approach taken by many businesses today in reporting on sustainability has been through the extension of conventional financial accounting and taking up sustainability reporting alongside or in combination with conventional financial accounting and reporting (Ball 2004a).

The private sector has lead the development of the sustainability reporting agenda indicating that this form of reporting is now contending to enter the business mainstream (KPMG 2008; Epstein 2008). In comparison, though, the public sector has lagged behind, with Ball (2004a p. 3) describing the up-take of sustainability reporting within the public sector as 'seemingly patchy' whilst both Tort (2010) and Dickinson *et al.* (2005) described it as an emerging field, still in its infancy, with approaches having been somewhat ad hoc. In a review of public sector sustainability reporting, the Global Reporting Initiative (GRI) (2005) found reporting to be scattered across multiple reports with no consistent approach adopted and a lack of focus on the organization's sustainability performance rather than a more concentrated focus on statements of policy.

Whilst public sector sustainability accounting and reporting are seen as an emerging field, Ball (2007, 2006b, 2005, 2004b, 2002) and Ball and Seal (2005), in focusing on local government, highlighted that there is much potential in its further development towards a sustainable development agenda. Sustainability reporting would provide an opportunity for public sector organizations to report to stakeholders on their contribution to sustainable development. This can be done through reporting on an organization's environmental, social and economic activities that are undertaken in the pursuit of sustainable development. In doing so, sustainability reporting needs to be seen from an integrated viewpoint, that is, a combined reporting approach that highlights the linkages and synergies between an organization's environmental, social and economic endeavours. This, then, assists in the advancement of an integrated viewpoint of sustainable development. In this context, sustainability reporting is defined as follows:

'An integrated approach to reporting to stakeholders that focuses on the environmental, social and economic activities undertaken that seek to achieve specific objectives identified in the pursuit of sustainable development'.

In addressing local government and the relevance of the sustainability reporting agenda, a review of the more extensive work undertaken within the private sector is now reviewed and extrapolated to the developments in the local government sector.

2.5 The Private Sector's Approach to Sustainability Reporting

The private sector has dominated the development of the sustainability reporting agenda (Ball and Bebbington 2008). For example, on a global scale, in a recent survey 79% of the top 250 companies of the Global Fortune 500 were found to be engaging in corporate responsibility[6] reporting activities (KPMG 2008). Whilst, from an Australian perspective, in 2008, it was found that 83% of the ASX top 100 companies were reporting on sustainability at some level[7] (Australian Council of Super Investors 2008).

A popular approach that has been taken up by the private sector in reporting on sustainability has been that of TBL reporting. This type of reporting focuses on the three components of sustainable development, being environmental protection, social equity and economic growth. The phrase was coined in 1994[8], by John Elkington, and has been regarded by many as being synonymous with sustainability reporting. Elkington provides a definition of triple-bottom-line as follows:

'The triple bottom line focuses corporations not just on the economic value they add, but also on the environmental and social value they add – and destroy. At its narrowest, the term 'triple bottom line' is used as a framework for measuring and reporting corporate performance against economic, social and environmental parameters. At its broadest, the term is used to capture the whole set of values,

[6] Corporate responsibility was defined for this study to include the ethical, economic, environmental and social impacts that concern the private sector. Reports examined included corporate responsibility and sustainability reports, company websites and annual reports.

[7] The extent of sustainability reporting varied amongst reporters - 33% of ASX listed companies reported in limited form; 27% provided an increased level of disclosure; 7% made reference to the GRI Reporting Framework and 16% report according to the GRI's Reporting Framework.

[8] There are various opinions over when John Elkington coined the term 'TBL. The website of Elkington's consultancy company, SustainAbility clarifies the date. (http://www.sustainability.com/aboutsustainability/keyfacts.asp?id=1359, accessed 29/09/10).

issues and processes that companies must address in order to minimise any harm resulting from their activities and to create economic, social and environmental value' (Vanclay 2004 p.28).

The triple-bottom-line reports intention was to move the focus from purely economic outcomes to social, environmental and economic outcomes by reporting on these three elements. There has been no prescribed reporting format set down for TBL reporting but it is considered to be one of the most widely used forms of sustainability reporting in the private sector today, as highlighted by Henriques & Richardson (2004) in stating '*the triple-bottom-line has become one of the main rallying cries for businesses trying to address sustainability'* (p. xx). In doing so, this form of reporting has played a key role in pushing the sustainability agenda forward in the private sector.

With no prescribed reporting format, no one single approach to TBL reporting has dominated (Adams *et al.* 2004) with a variety of reporting approaches being utilized by organizations with some reporting via monetary units whereas others utilize sustainability indicators[9] as developed by an array of reporting frameworks[10], including the GRI guidelines (Lamberton 2005).

Triple-bottom-line reporting is often used interchangeably with the term sustainability reporting (Van den Bergh 1996; Westing 1996) and is considered by many to mean the same thing. However, these two forms of reporting are not the same. At first glance, they appear to be – both focus on the three elements of sustainability and both provide a reporting mechanism to report on these elements. However, in recent times the term triple-bottom-line is increasingly becoming a sub-set of sustainability accounting (KPMG 2008) with one of the main differences between the two forms of reporting being the reporting focus. Sustainability reporting requires consideration of a long-term forward looking time horizon whilst TBL reporting tends to focus on a short-term backward looking viewpoint with such reporting in the private sector often driven by short-term

[9] An indicator is '*a parameter, or a value derived from parameters, which points to, provides information about, describes the state of a phenomenon/environment/area, with a significance extending beyond that directly associated with a parameter value'* (OECD 2003 p. 5). Key functions of indicators are to simplify, quantify, standardize and communicate (UNEP 2003).
[10] The different reporting frameworks are discussed in Chapter 3.

annual reporting cycles (Lozano and Huisingh 2010; Henriques 2004). This has lead to some critics considering TBL reporting to be little more than conventional financial reporting with some additional social and environmental performance measures added in (Luckman 2006). Perhaps this is a harsh viewpoint to take. However, for sustainability reporting to be advanced, it needs to look and report longer term than the annual reporting cycle traditionally adopted.

A further disparity between the two forms of reporting is their underlying objectives. Sustainability reporting is driven by the need to be accountable towards the goal of sustainable development – that is, development which maintains, integrates and, where possible, improves environmental protection, social equity and economic growth. The private sector's objective is providing a financial return to its shareholders – that is, focusing on economic growth in an effort to increase and improve the bottom-line. As highlighted by Ball (2004a), whilst the financial interests of shareholders remain the key focus of the private sector, there is arguably little real possibility of companies sacrificing profit in an effort to attain sustainable development.

Other criticisms have also been raised aimed at TBL reporting practices within the private sector focusing on issues of lack of quality, completeness, credibility, accountability and/or complexity in reporting (Hubbard 2009b; Ball and Bebbington 2008; Adams and Frost 2008; Milne *et al.* 2008, 2003; Cooper and Owen 2007; Gray 2006a; Chapman and Milne 2004; Adams 2004; Gray and Milne 2004, 2002; Morhardt *et al.* 2002), rhetorical claims (Milne *et al.* 2009, 2006; Aras and Crowther 2009), image and reputation reporting management (Bebbington *et al.* 2008; Mitchell *et al.* 2008; Unerman *et al.* 2007; Adams 2002) and reporting from a positivist viewpoint rather than a balanced reflection of performance – 'greenwash' reporting (Schaltegger and Burritt 2009; Hubbard 2009b, 2006; Owen 2006; Tregridge and Milne 2006; Gray and Milne 2004; Doane 2004).

Further, whilst it is argued that the private sector has dominated the sustainability reporting agenda, the total number of corporations actually reporting on sustainability is insignificant when compared with the total number of businesses operating in the world

today. There are approximately 60,000 multinational companies operating world-wide but less than 2,000 reports are being produced per annum – this is a trivial level of achievement (Milne and Gray 2007).

With such a plethora of criticisms leveled at the TBL reporting approach, perhaps this approach has not achieved the sustainability outcomes that Elkington originally set out to achieve in coining the term. This is evidenced by Elkington (1997) acknowledging that sustainability accounting and reporting for TBL was under-developed and imprecise whilst in 2004 readily admitting that TBL is not the same thing as sustainability (Elkington 2004; also argued in Milne *et al.* 2008; Archel *et al.* 2008; Milne and Gray 2007; Gray 2006a and b; Moneva *et al.* 2006; Gray and Milne 2004; Morhardt *et al.* 2002). Others have pursued this point with Buhr (2007) stating that TBL reporting only gets us part way to sustainability and Zadek (2001b p.8) considered it '*creates more confusion than good*'. Milne *et al.* (2008), whilst highlighting that taking up TBL reporting may be an important first step for many business organizations, considered TBL reporting unlikely to be a sufficient condition for sustainability and, indeed, may lead to greater levels of un-sustainability (p. 1). Further, Milne and Gray (2007) argued that TBL reporting was more of a distraction towards substantative sustainability or, worse, the very means to frustrate moves towards the changes that sustainability requires. Perhaps, though, an alternative viewpoint is required at this point. In contrast to the lack of action by the public sector, the private sector should be applauded for attempting to take up the challenge of the sustainable development agenda. Whilst there will be misgivings and issues with reporting, the private sector has instigated a reporting process and this at least offers some potential for change and challenge through awareness-raising and problem solving in an effort to move towards sustainability through sustainability accounting and reporting (Burritt and Schaltegger 2010). The public sector, on the other hand, is yet to appreciate and comprehend the task fully.

In an effort to develop a sustainability reporting approach for the local government sector, the public sector could simply follow the private sector in the development of such reporting. However, in light of the criticisms leveled at the private sector, though, as considered by Ball (2006a, 2004a), the development of sustainability reporting for the

public sector should be different from the private sector's approach. This is now discussed.

2.5.1 Should the Public Sector Follow the Private Sector?

While the private sector has lead the development of the sustainability reporting agenda, the public sector can choose to follow that lead or identify a reporting approach which is more appropriate for that sector. Ball (2006a, 2004a) argues, whilst much can be gleaned from the private sector's experience, an opportunity exists today for public sector entities to develop their own sustainability reporting framework specifically tailored to their own objectives and environments. Guthrie *et al.* (2010) concurred with this general viewpoint in considering possible future research directions for the public sector; '*scholars should not be handmaidens to private sector management ideals*' (p. 452).

Public sector organizations are different from private sector organizations; they have different objectives and different accountabilities from the private sector. This was considered in a recent response paper (Simpkins 2006 p. 3, 16) to the international conceptual frameworks project by a number of standard-setting bodies. The paper highlighted the many differences between public and private entities. As discussed in the paper, these entities have different objectives; the public sector's emphasis is on accountability or, as CIPFA (2006) argue, the need to improve quality of life in comparison to the private sectors focus on profit making. They further have different operating environments and different users that require different information from the private sector.

Barton (2004, 2005), whilst focusing on the application of private sector accounting techniques and standards on the public sector, also concluded that there are major differences between the two sectors. He argued that there is a need for different accounting techniques and approaches tailored to suit the unique characteristics of the public sector (discussed also in GASB's (2006) white paper)[11]:

[11] However, in a contrasting viewpoint, Laughlin (2008) argued the case for the continued application of private sector standards for public-benefit entities (PBEs). In recognizing differences between the two sectors, Laughlin also highlighted that some private sector standards may not always be appropriate for PBEs.

> '*Parts of the public sector environment are so different from a business environment that a differentiated approach is required … The public and private sectors of the nation are not identical twins. The fundamental differences between the two must be acknowledged and accounting standards designed, where necessary, to suit the unique characteristics of the public sector'* (2004 pp. 22-23).

Ball and Grubnic (2007) argued that the public sector, due to their social accountabilities, has far greater responsibilities for sustainable development than the corporate sector has ever been expected to take on. It was concluded that a distinctive agenda for sustainability accounting and reporting is required to push forward sustainable development in the public sector. Ball (2006a) further contended that sustainability reporting in the public sector must reflect these greater responsibilities in providing political leadership and catalyzing change in addressing core issues of sustainability (p. 20).

Ball and Bebbington (2008) also argued that the public sector, in setting its own sustainability accounting and reporting agenda, may be able to achieve better reporting and performance than the private sector. Burritt *et al.* (2009) concurred with this when, in examining the positive and negative aspects relating to sustainability accounting in the public sector, they concluded that the public sector appears to have some advantages over the private sector in the development of sustainability accounting.

Ball (2006a), in highlighting the size and influence of the public sector, considered that governments are expected to 'walk the talk' on sustainability through leading by example in reporting publicly and transparently on their activities to promote sustainability. Whilst Birney *et al.* (2010) highlighted that public service organizations are central to the delivery of sustainable development as they are intricately involved in activities which shape people's lives and need to take up this challenge. With a different emphasis on reporting and why reporting should be conducted in the public sector, public sector organizations need to direct and develop their own sustainability reporting framework. This was considered by the Public Agency Sector Supplement (GRI 2005):

*'Given their size and influence, public agencies are expected to lead by example in reporting publicly and transparently on their activities to promote sustainability' (*p.7).

If local governments are to pursue their own sustainability reporting agenda, there needs to be initial consideration of why such reporting has not yet been advanced.

2.6 Sustainability Reporting in the Local Government Sector

Whilst the private sector has dominated the development of sustainability reporting, public sector reporting can be seen as an emerging field. There are a number of potential explanations for this lag in take-up with lack of mandatory legislation being a possible reason in the local government sector. Whilst it must be acknowledged lack of mandatory reporting requirements has not prevented the private sector initiating sustainability reporting, perhaps local governments require mandated reporting requirements to compel them to commence the reporting process. From an Australian local government perspective, there are limited legislative requirements in regards to sustainability reporting, with NSW taking the lead on this approach whilst the other States lag behind.

With a firm focus on environmental reporting, under section 428 of the Local Government Act 1993, local authorities in NSW are required to prepare a State of the Environment (SoE) Report every four years for their local authority or jointly for their region. In between years, authorities can prepare supplementary reports if they wish to do so. Further to this reporting requirement, the 'Integrated Planning and Reporting Framework' has recently been introduced[12] which requires NSW local authorities to undertake mandatory planning and reporting requirements, as required by the Local Government Amendment (Planning and Reporting) Act 2009. The framework extends reporting requirements for local authorities beyond environmental concerns, as required through the SOE report, to consider and report on social, economic, environmental and civic leadership aspects in their long-term planning and reporting requirements (Division of Local Government 2010 p. 23).

[12] The Framework is being phased in over a three year period commencing from 30 June 2010.

One of the perceived benefits of this framework is the '*improved sustainability of the local community by encouraging councils, State agencies and the community to work together on long term plans'* (Division of Local Government 2010 p. 3). However, from a reporting viewpoint, the lack of guidance for local authorities on how to report is quite disappointing with instructions such as '*the report (annual) should address each of the strategies …… and should answer the following key questions- Did council do what it said it would do? If not, why not?*' (p. 108). In providing non-mandated reporting instructions, this will not necessarily help in providing or promoting a consistent reporting basis for local authorities.

Whilst NSW is following this mandatory approach, this is an exception rather than the norm in comparison to the remaining States and Territories in Australia which tend to have focused on performance reporting via indicator sets with only nominal numbers of indicators having a firm focus on sustainable development. For example, the proposed 'Local Government Monitoring Framework' in Victoria[13] is based around reporting on a set of 65 indicators with only a minor number specially related to sustainability.

With this lack of mandatory reporting requirements in place, many public sector organizations are simply choosing not to report on sustainability (Lamprinidi and Kubo 2008). This may change in the future, though with Senator Stephens (2008) indicating that a current area of consideration for the Australian Government is '*sustainability reporting including mandatory reporting for public sector agencies*'. No further explanation or detail has been provided, though, by the Australian government at this point in time.

Historical events also assist in providing an understanding of why the public sector lags in the up-take of sustainability reporting. For example, the reaction by Australian local government authorities to accounting-based reforms introduced in the early 1980's provides insights into how the sector manages and handles change. The reforms, known as new public management (NPM), brought about major modifications to the public sector in Australia which were seen as an effort to modernize the sector. Such changes

[13] It is envisaged that the mandated reporting framework will be fully implemented by 2012/2013 (Essential Services Commission 2010).

included an increased emphasis on efficiency and accountability and the introduction of commercial business accounting and management techniques including accrual accounting (Carlin 2005; Broadbent and Laughlin 2005; Guthrie *et al.* 2005, 1999; Christensen 2003; Olson *et al.* 2001, 1998; Parker and Gould 1999; Guthrie 1998, 1993; Hood 1995, 1991). In doing so, it acknowledged the ideological position that the private sector is seen as being more efficient and effective than the public sector in using better accounting practices and by driving down the cost of services by focusing on profit (Kloot 2006).

By extending the accounting system from a cash to an accrual-based system, it was believed that the full cost of activities could be determined which would ensure improved efficiency of resources, increased accountability and financial transparency of governmental organizations (Christiaens and Rommel 2008). Further, it would help to improve the poor levels of financial management of local government authorities (Ryan 2003).

With reference to local government, accrual accounting was introduced from 1 July 1993 with the implementation of the Australian Accounting Standard AAS 27 *Financial Reporting by Local Government*. This entailed major accounting changes for local authorities including the capitalization of assets and the inclusion of depreciation expenditure in the operating statement.

Whilst this standard was thrust on local government, opinions were split and still are today as to its introduction and applicability to the public sector (Anessi-Pessina *et al.* 2008; Christensen 2007; Anessi-Pessina and Steccolini 2007; Carlin 2005 and Guthrie 1998 provide overviews of the debate in support and against).

Differences in opinion within local government are made more apparent when research is examined that has been conducted on the accounting practices of the public sector since implementation of AAS 27. Such research includes Pilcher (2000) who, in a survey across twenty-six local government authorities in NSW, concluded that there is confusion and lack of compliance with AAS 27. Further, it was found that questions still exist with local government authorities as to the applicability of the standard within the public

sector. This was also highlighted in research conducted by Walker *et al.* (2004) who found evidence of strong antipathy towards the application of AAS 27 and the usefulness of financial information generated from application of the standard. In specifically focusing on the valuation of the land under roads requirements and of the standard, both Rowles *et al.* (1998a) and Molland and Bellamy (1997) highlighted considerable cynicism about the usefulness of the accounting requirement. However, in doing so Rowles *et al.* (1998a) also emphasized that such cynicism appeared to be more of a lack of understanding by local government financial managers rather than a technical issue with the standard as such[14].

In 2000, CPA Australia, in surveying twenty-five public sector agencies and their accounting policies and systems, concluded that many of the organizations were reluctant to move away from traditional cash to accrual-based systems and were operating dual cash and accrual-based systems. It was concluded that this was adding an overhead burden on departments and sending mixed messages to managers as to the relevance of an accrual-based accounting framework (p. 22). However, with only one local authority included in the survey results, with no raw data for the responses to the questions provided and lack of anonymity for respondents, these results need to be treated with caution.

In reviewing compliance levels of 177 local government annual reports in NSW over the period 1994 – 1997, Laing (2007) found specific areas of non-compliance with AAS 27, in particular, the measurement of assets and liabilities and the accounting treatment of non-current assets. Similar results were found by Peters *et al.* (1997) who, in focusing on the Brisbane City Council's implementation approach to AAS 27, concluded that there were problems in complying with the standard's requirements in recognizing, valuing and depreciating non-current infrastructure assets.

Other research includes a study conducted by Pilcher (2005) who focused on the asset valuation and depreciation practices of all NSW local authorities (172) from 1999/00 – 2002/03 in combination with in-depth case-study analysis including interviews. Pilcher

[14] Also discussed in Rowles *et al.* (1998b).

found that for many local authorities, the methods of asset valuation, allocation of useful lives and subsequent reported depreciation expense were calculated illogically and inconsistently (p. 188). Whilst recent research by Molland and Clift (2008) highlights there is still a number of issues being faced by local government in trying to achieve accrual accounting even though it has been over fifteen years since the standard was introduced.

Perhaps, though, these issues of financial reform are exacerbated within the public sector as some have debated, by the imposition of private sector accrual accounting practices that are simply not suited to public sector organizations and need to be modified to suit the public sector's unique characteristics (Barton 1999, 2004, 2005, 2007; Carnegie and West 2003, 2005; Carnegie 2005).

It appears that there are some major but fundamental challenges in the adoption and acceptance of this AAS Standard within the local government sector. Whilst this may be so, accrual accounting is a basic technique of accounting that provides for organizations to plan properly for efficient and effective resource management. Local government needs to account properly and be accountable for their resources and accrual accounting has been provided as an avenue to do so. As stated by Barton (2007 p. 83), '*governments must have an accrual accounting system to identify, measure and manage all of their resources*' -whether that be the current accounting system in place or a modified one specific to the public sector (as further contended by Barton 2007), the public sector needs to account properly and be held accountable for their resource management.

It. therefore, may be argued by some that the ongoing problems occurring in local government in the accounting of AAS 27 are due to the enforcement of private sector accounting techniques that are ill-suited. However, as Molland and Clift (2008) counter argue, '*both sectors, no matter how different, should have efficiency and effectiveness as their prime objective in the allocation of resources … accrual accounting achieves this objective*' (p. 105). Perhaps, rather than the continual discussion and debate of the problem, it is time for local government authorities to take action. They need to take responsibility and work within the confines of this standard and, in doing so, provide

direction and leadership in the further development of accrual-related practices for the public sector. This discussion draws attention to an issue that may be contributing towards the ad hoc take-up of sustainability reporting within local government. As highlighted by this review of AAS 27, there has been reluctance by local governments in the past towards change; and this reluctance is simply continuing today in the take-up of sustainability reporting by local government organizations. If this is the case, in today's world with the need for more accountability towards the environment and social sphere in which organizations operate, the public sector viewpoint is not acceptable and requires change.

A further reason that may help to explain more fully the lag in up-take of sustainability reporting by local government authorities could be accounted for in terms of communication theory as applied to accounting. This explanation provides a different perspective of the reporting process and is now discussed.

2.7 Communication Theory

Communication as a concept in the English language originated during the 14th and 15th centuries but it was not until the 19th century that the term was used regularly (Baker *et al.* 2002). The Oxford Dictionary (2011) defines communication as the '*imparting or exchanging of information by speaking, writing, or using some other medium*'. Others have defined it as '*the management of messages for the purpose of creating meaning*' (Frey *et al.* 1991) whilst Cherry (1957) defined it as '*an attempt to establish commonness or a relationship between source and destination*'. Whilst there are numerous definitions of the term, it is generally accepted today that there is a minimum of three basic elements present in any communication process; the source (originator), the destination (recipient) and the information intended to be communicated (Shannon and Weaver 1971). Communication theory is the study of these elements and their interaction in the process of communication.

In focusing on accounting and the communication process, communication is a critical component of accounting. Lee (1982) argued that accounting is as much about communication as it is to do with measurement, stating '*no matter how effective the*

process of accounting quantification, its resultant data will be less than effective unless they are communicated properly' (p. 152). Similarly, Lentz (2004) highlighted the point that accounting is not only about numbers, but it is also about communication. Communication of information is considered to be one of the key purposes of general purpose financial reporting, as stated in Statement of Accounting Concepts SAC 2:

> *'General purpose financial reporting is not an end in itself, but is a means of communicating relevant and reliable information about a reporting entity to users'* (1990 paragraph 11).

This communicated information is required by users '*for making and evaluating decisions about the allocation of scarce resources*' (SAC 2 1990 paragraph 26). However, whilst communication may be considered an important component of financial reporting and despite the fact that communication theory has been successfully introduced into many of the science disciplines, very little has been done to apply communication theory to accounting with Bedford and Beladouni (1962) stating '*the opportunities that communication theory may hold for the advancement of accountancy are as yet unexplored*' (p. 650). This discrepancy between theory and actual practice was further discussed by Lentz (2004).

> *'While accounting has for a long time given lip service to the notion that communication is central to its purpose, actual application of interpersonal communication theories to the accounting process is lacking in day-to-day practice. Instead of concern about whether information has been 'moved' from the sender to the receiver, there seems to be a greater focus on adherence to rules and on liability protection. It would appear that the accounting profession traditionally develops and implements more accounting grammar rules rather than determining the actual information requirements and improving the communication process'* (p. 17).

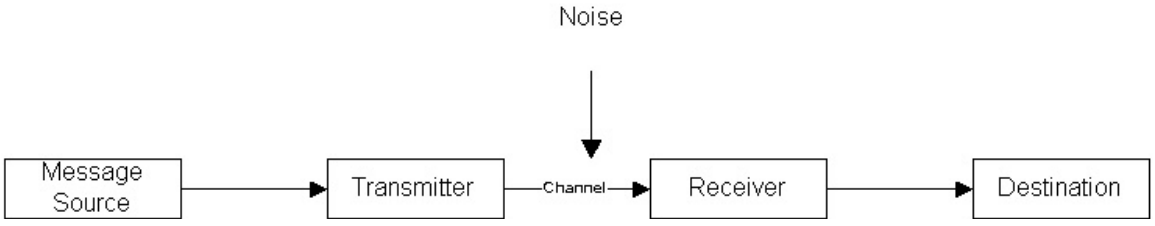
By applying communication theory to accounting, this may help to provide new insights into the accounting process and the role of communication in that process. For example, by viewing sustainability reporting within local government authorities as part of a

communication process, perhaps the lag in uptake of this form of reporting has more to do with a breakdown or gaps in the communication process. Questions can then be asked such as 'did the communicator say what he/she intended to convey?', 'was the reporting channel of communication appropriate?', and 'did the receiver understand what the sender of the message intended?' which help both to highlight the important role of communication in the accounting process but also to highlight any breakdown or gaps in the communication process. In doing so, appropriate procedures could then be put in place to remedy this breakdown in communication. To gain an understanding of communication, the process of communication is now considered.

2.7.1 The Communication Process

In an attempt to explain the communication process, Shannon and Weaver, in 1949, developed a model of communication, known as the 'transmission model of communication'. This model has had a major influence on communication theory today. The model was based around five elements as shown diagrammatically in Figure 1; the information source produces a message; the message is then passed along a channel from the transmitter to a receiver who interprets the message and passes the information to the destination.

Figure 1
Shannon and Weaver – Model of Communication



This model, however, is not without its drawbacks. As discussed by Tesson (2006), this model disregards the influence of contexts and environments. It assumes that all communication travels from point to point, that is, from the source to the receiver. In doing so, any extraneous information is considered to be noise which the receiver must

filter out to discern the meaning of the message. A further drawback of this model is that it does not allow for feedback from the receiver to the source, in only providing a one way information flow. Other models of communication have also been developed other than the Shannon and Weaver model, such as models developed by Richards (1936), Berger (1988) and Berger and Gudykunst (1991). As highlighted by Baladouni (1966), though, the major difference between these models is essentially the number of communication elements due to difference in purpose or the point of view of the discipline from which the model emerged.

In attempting to explain the communication process from an accounting perspective, there has been a number of accounting communication models that have been developed. These include Bedford and Baladouni (1962), Fertakis (1969) and McCabe (1973). Whilst there are variations between models due to emphasis being placed on different elements within the communication process, each model highlights the importance of communication in the accounting process (Lentz 2004) and includes the basic elements of communication; the accountant (the sender), the user (the receiver) and the accounting report (the message).

The accounting report is considered to be the message that is produced and passed through the channel from the sender to the receiver. Two accounting reports that are communicated as part of the accounting process include the general purpose financial report and the sustainability report. Examining the different elements of the communication process and how they work together in transmitting these reports from the sender to the receiver can help to provide a clearer picture of the accounting processes at work in both mandatory and voluntary accounting processes.

The accountant, being the sender of the message, is entrusted with the responsibility to determine the message to be communicated to the user. In the case of general purpose financial reports, this is largely governed by mandatory accounting standards. However, in the case of sustainability reports, there are no mandated rules or guidelines. There is, therefore, more flexibility in determining the message to be communicated, how it is to be communicated, in what form and, even, who prepares the message. The message then

has to be transmitted to the receiver through a chosen communication channel. Accounting reports are transmitted via general purpose financial reports and are largely either in paper form or via the internet. For reporting on sustainability, there are no restrictions on which communication channel should be utilized.

Accounting information contained in general purpose financial reports is required by receivers to make and evaluate decisions about the allocation of scarce resources (SAC 2 1990 paragraph 26). Thus, the messages that are transmitted are required to be understandable, relevant, reliable and comparable (AASB Framework 2007 paragraph 24). In contrast, with the lack of formal mandated guidelines for sustainability reporting, there are no formal qualitative attributes or requirements that need to be met in reporting information to users.

Examining the various elements of the communication process will help to identify possible issues in the reporting process that need to be rectified to provide for the advancement of the sustainability reporting agenda in the local government sector. This research will undertake to highlight these issues by focusing on the role of communication and, in doing so, will seek to provide an exploratory framework in attempting to gain an understanding of sustainability reporting practices in local government.

2.8 Summary

This chapter has examined the public sector with specific focus on the local government sector. It has defined key terms and definitions of this study and then provided an overview of accounting and reporting for sustainability. It further discussed potential explanations for the lack of advancement of sustainability reporting in the public sector highlighting the importance of communication theory in the reporting process.

In Chapter 3, a discussion of available frameworks is provided with possible contributions identified towards a framework for the local government sector.

Chapter 3 A Framework for the Local Government Sector

3.1 Introduction

The need for a common sustainability reporting structure at the local government level is discussed in this chapter. This is followed by an analysis of frameworks that guide the current sustainability agenda including specific frameworks that target the public sector. Possible contributions are identified towards the development of a broad sustainability reporting framework for local government.

3.2 A Common Structure for Sustainability Reporting

To develop sustainability reporting at the local government level, a common reporting structure is required to ensure comparability, transparency and readability. Developing such a structure would help to reduce duplication of effort across individual local authorities in establishing sustainability reporting structures while at the same time providing a common direction for organizations (Public Accounts Committee 2005 p. 31). In examining the role of such a structure from the public sector viewpoint, Ball (2004a) believed it would help to encourage best practice in the public sector and provide valuable help and assistance for organizations commencing the due process. Further, the Auditor-General for NSW (Public Accounts Committee 2005 p. 31) reported that it would give public agencies central direction and improve consistency in reporting.

Such a framework is important for the local government sector given the three different levels of government in Australia and the differing responsibilities of each. A framework for local government would provide for consistency and comparability whilst providing a reporting structure that is specific and adaptable to the needs and issues faced by individual local authorities.

Currently, though, there is a lack of a coordinated reporting structure on sustainability reporting both at the public sector level (Lamprinidi and Kubo 2008) and at the individual local government level. Dollery *et al.* (2006), in examining possible reasons for this from

a local government perspective, considered that perhaps the excessive emphasis placed on financial (economic) sustainability has restricted the development of a broader reporting structure at the local government level. The reality is that the emphasis needs to shift from an economic perspective to a more balanced perspective embracing the environment, social equity and economic growth.

To provide assistance in the development of such a structure, an investigation is now undertaken of guidance that is available to support the local government sector in Australia through existing guidelines and frameworks and if any would be suitable in contributing towards the establishment of a local government framework. Where deemed suitable, such frameworks are highlighted as possible contributions.

3.3 Frameworks that Provide Guidance for Sustainability Reporting in Australia

There are a number of strategies and frameworks/guidelines that have been developed at the Commonwealth Government level to provide direction and assistance to organizations. These frameworks rather than focusing on an integrated viewpoint of sustainability have focused on one component of sustainability, that is, environmental sustainability.

The National Strategy for Ecologically Sustainable Development (ESD) was implemented by the Commonwealth Government in 1992. This strategy provides broad strategic direction for government agencies to direct policy and decision-making in the area of ESD. Unfortunately, this offers little guidance to local government authorities as the focus is on Commonwealth government agencies. However, one specific objective that is targeted at local authorities is Objective 16:3 of the strategy. This objective requires all local government authorities to incorporate ecological sustainable strategies into their forward plans (Commonwealth of Australia 1992) but offers no guidance as to how this might be achieved.

This is an important point to consider – organizations seeking to be more sustainable need to ensure that they take such strategies into account in their strategic planning and reporting. However, organizations should not only consider their ecological strategies,

they need to go one step further and examine social and economic strategies to provide for an integrated and sustainable approach to strategic planning. By doing so, this would provide forward-looking and long-term sustainability strategies to be developed towards the ultimate goal of sustainable development. Such an approach will provide a sound overall direction in the development of a local government reporting framework in Australia.

Development of a Local Government Framework	
Contribution Number 1:	Incorporation of sustainable strategies into strategic planning and reporting

The Commonwealth Government has also released two guidelines to assist both public and private sectors in the pursuit of environmental reporting, the first being the Framework for Public Environmental Reporting - An Australian Approach. The framework provides broad guidance in preparing public environmental reports for both the private and public sectors. Such guidance includes details on how to prepare and what to include in an environmental report and the key steps in generating such a report through the use of indicators (Commonwealth of Australia 2000).

The second environmental guideline was released in June 2003 (A Guide to Reporting against Environmental Indicators) to assist both the public and private sectors in the development of environmental reporting using indicators (Commonwealth of Australia 2003 page 4). The indicators provided in the report were aligned to the internationally developed GRI guidelines (2002) environmental indicators. The GRI is regarded as the major source of guidance today for sustainability reporting (Brown *et al*. 2009; Adams and Frost 2007). As such, it was felt that the indicators would provide consistency with the GRI while reporting in such a manner that focuses on Australian needs and conditions (p. 62).

Two additional documents were expected to be released later in 2003/2004 by the Commonwealth Government[1]; one to be focused on the development of social reporting using indicators and the other focused on economic reporting using indicators[2]. A limited release draft document for social indicators was released in 2003; however, it was developed no further. No further documents have since been released.

On review of the two released documents (Framework for Public Environmental Reporting and A Guide to Reporting against Environmental Indicators), it is concluded that neither document develops a foundational reporting basis that would help to drive and make changes towards a more sustainable organization. Rather, the reporting approach of the two documents is based around the selection of environmental indicators to report against. Whilst indicators are useful in helping to identify and explain, such an approach to reporting does little to indicate how sustainable the organization actually is, how an organization is working towards achieving sustainable development and at what point an organization moves from being 'unsustainable' to 'sustainable'. In doing so, there is the risk that such a reporting approach can lead to little more than the report being treated as just 'another report' by both organizations and stakeholders alike. If an approach to sustainability reporting in local government is to be developed, it needs to look much wider than the approach adopted in these two documents; it needs to be reporting that tells a story towards the goal of sustainable development. Therefore, these two reporting frameworks will not be considered in the development of a framework for local government.

The Local Government and Planning Minister's Council (LGPM)[3] released three national frameworks in March 2007. They are the 'Criteria for Assessing Financial Sustainability Framework', the 'Asset Planning and Management Framework' and the 'Financial Planning and Reporting Network'. In May 2009, two up-dated frameworks were provided, entitled the 'Enhanced National Framework on Asset Planning and

[1] Commonwealth Department of Family and Community Services (FACS)
[2] 'A Guide to Social Indicators and Methodologies' and 'A Guide to Economic Indicators and Methodologies'.
[3] Made up of Local Government and Planning Ministers from across Australia and New Zealand, as well as the President of the Australian Local Government Association.

Management' and the 'Enhanced National Framework on Financial Planning and Reporting'.

It was believed that, depending on the extent of their adoption in the various jurisdictions, these frameworks have the potential to provide information to assess local government performance and reporting in future years (Department of Transport and Regional Services 2007). However, on review of these frameworks, they provide few insights into new ways of moving forward in the area of sustainable development for local government – rather, they promote the application of basic financial accounting principles to provide for consistency in planning and reporting across local government.

The above documents provide little structure or frame of reference to guide local government in the development of an integrated sustainability reporting approach. For sustainability to be achieved, frameworks need to be developed that encompass and integrate the three components of sustainability. Sustainability cannot be achieved by the lone pursuit of one component – it must be integrated across multiple objectives of an organization.

In looking from a broader perspective, there are private sector initiatives that have been developed at an international level to help guide sustainability reporting today. These frameworks and guidelines are now discussed with a particular emphasis on specific frameworks that target the public sector and if any could assist in the development of a local government framework.

3.4 International Frameworks for Sustainability Reporting

There is a number of international sustainability reporting systems and frameworks available for use today. These include amongst others the GRI Reporting Framework (incorporating the GRI Reporting Guidelines), the balanced scorecard, the sustainability balanced scorecard, ISO 14000 series and AccountAbility AA1000s. The GRI Framework is considered the current leading framework today for both private and public organizations as highlighted by Dumay *et al.* (2010), who stated '*as with the private sector, it appears that the GRI dominates the current reporting practices of public and*

third sector organizations' (p.544). This framework will firstly be reviewed, followed then by a discussion of a number of other frameworks.

3.4.1 The Global Reporting Initiative (GRI) Framework

The GRI is a global reporting framework for businesses to report information measuring their economic, environmental and social performance. In 2000, the GRI Sustainability Reporting Guidelines were released, with a revised version issued in 2002 and a further revised version, known as G3, released in 2006[4].

This framework today is internationally known as the leading source of guidance in sustainability reporting (Morhardt *et al.* 2002). Of the top 100 global companies, it has been reported that 64% utilize the GRI guidelines as the basis for sustainability reporting (http://www.globalreporting.org accessed 08/11/10). In a recent report of corporate sustainability reporting in Australia, 70% (350 companies) of Australia's top 500 companies who produced a sustainability report for 2006 followed or made reference to the GRI guidelines (KPMG 2007 p. 10). From a public sector perspective, in a recent international mail survey, it was found that nearly 50% of respondents (thirty respondents) were utilizing the GRI guidelines in their sustainability reporting (Dickinson *et al*. 2005).

GRI's purpose in producing a reporting framework was to make sustainability accounting as routine and comparable as financial reporting (Simnett and Nugent 2006). It is designed for use by organizations of any size, sector or location. The framework is made up of three components (GRI 2006);

- The sustainability reporting guidelines. The guidelines provide the principles for defining the report content, reporting guidance and standard disclosures, including indicators to outline a framework that organizations can adopt

[4] An updated version of the GRI Guidelines, entitled G3.1 was released in March 2011 with expanded reporting guidance provided on human rights, local community and gender. A further update, G4 is planned to be published in 2013. Due to the timing of the G3.1 version, for the purposes of this study, the focus is on the G3 Guidelines.

(http://www.globalreporting.org/ReportingFramework/ReportingFrameworkOverview/). They are the foundation of any GRI reporting document.

- Technical and indicator protocols. These protocols assist users in applying the GRI guidelines. They contain the key definitions and other technical references.

- Sector supplements. The supplements exist to supplement the core guidelines and attempt to capture the unique set of sustainability issues faced by different industry sectors. There are currently fifteen sector supplements that cover a wide array of sectors including construction and real estate, financial services, mining and metals, telecommunications and public agency.

These three components of the GRI framework can be shown diagrammatically, as follows:

Figure 2
The GRI Reporting Framework[5]

[5] Source: Global Reporting Initiative. (2006). *Sustainability Reporting Guidelines*. Global Reporting Initiative. Amsterdam. The Netherlands.

3.4.1.1 How Does the GRI Framework Report on Sustainable Development?

There are two main stages that are suggested in the development of a GRI sustainability report, as follows.

1. Define Report Content, Quality and Boundary – The broad content of the report, the quality and the boundaries of the report need to be determined. The GRI framework provides for flexibility in that organizations can choose what level to comply with the guidelines – whether it be full compliance or just a component of the guidelines. (GRI 2006 p.5-6).

2. Standard Disclosures – The framework specifies the core content that should appear in a sustainability report. There are three different types of disclosures; disclosures that provide a high-level understanding of the organization's strategy, profile and governance policies; disclosures that focus on the organization's management approach and disclosures that focus on performance indicators on the economic, social and environmental performance of the organization; with the main form of disclosure being the performance indicators.

The framework provides the performance indicators for reporting of an organization's performance. They are divided into reporting aspects across the three categories, which are then further divided into core and additional indicators. Organizations are encouraged to report on the core indicators as a minimum, unless they are deemed not material.

The aspects for economic, social and environmental indicators, as provided in the framework are provided in Table 3.1 (with the number of core and additional indicators indicated in brackets for each aspect).

Table 3.1
Categories for Economic, Social and Environmental Indicators

Economic Performance Aspects	**Social Performance Aspects**	**Environmental Performance Aspects**
Economic Performance (4 core)	*Labour Practices and Decent Work*	Materials (2 core)
Market Presence (2 core, 1 additional)	Employment (2 core, 1 additional)	Energy (2 core, 3 additional)
Indirect Economic Impacts (1 core, 1 additional)	Labour/Management Relations (2 core)	Water (1 core, 2 additional)
	Occupational Health and Safety (2 core, 2 additional)	Biodiversity (2 core, 3 additional)
	Training and Education (1 core, 1 additional)	Emissions, Effluents and Waste (7 core, 3 additional)
	Diversity and Equal Opportunity (2 core)	Products and Services (2 core)
	Human Rights	Compliance (1 core)
	Investment and Procurement Practices (2 core, 1 additional)	Transport (1 additional)
	Non-Discrimination (1 core)	Overall (1 additional)
	Freedom of Association and Collective Bargaining (1 core)	
	Child Labour (1 core)	
	Forced and Compulsory Labour (1 core)	
	Security Practices (1 additional)	
	Indigenous Affairs (1 additional)	
	Society	
	Community (1 core)	
	Corruption (3 core)	
	Public Policy (1 core, 1 additional)	
	Anti-Competitive Behaviour (1 additional)	
	Compliance (1 core)	
	Product Responsibility	
	Customer Health and Safety (1 core, 1 additional)	
	Product and Service Labeling (1 core, 2 additional)	
	Marketing Communications (1 core, 1 additional)	
	Customer Privacy (1 additional)	
	Compliance (1 core)	
Total Indicators = 9 (7 core, 2 additional)	**Total indicators = 39 (25 core, 14 additional)**	**Total indicators = 30 (17 core, 13 additional)**

Thus, there are thirty-four aspects which provide for a total of seventy-eight indicators (49 core, 29 additional as shown in Table 3.1) split across three categories that could

potentially be reported on. It is recommended that organizations collate the data into a single consolidated sustainability report (GRI 2006 p. 37). It is interesting to note that the weighting of the indicators is heavily biased towards social indicators, with over 50% of core indicators being in this category. No explanation is provided in the guidelines why this is so.

Ever increasing numbers of organizations support and utilize the GRI framework world-wide today. In view of this, the framework will now be examined critically in an effort to determine its adequacy as a reporting framework for local government in Australia.

3.4.1.2 Criticisms of the GRI Framework

There have been numerous questions raised as to the adequacy of the framework both from a private and public sector perspective. Moneva *et al.* (2006) reported that a key criticism of the guidelines was the lack of an explicit definition for sustainable development. However, this situation has been rectified in the G3 version of the guidelines with the document referring to the Brundtland definition as being the goal of sustainable development (GRI 2006 p.2).

Another criticism of the guidelines is the reductionalist approach through the use of the suite-of-indicators approach for the three components of sustainability and the eradication of an integrated view of sustainable development (Moneva *et al.* 2006). By reducing sustainable development to this level, the GRI guidelines run the risk of losing sight of the big picture for sustainability and obstructing an integrated view of sustainability to the point where the guidelines are no more than an administrative reform (Larrinaga *et al.* 2002; Owen *et al.* 1997). Simply providing a table of indicators for the three components of sustainability can lead to little more than an exercise in compliance rather than a reporting process leading towards sustainability (AccountAbility 2006). Such reporting tends to create compartmentalization (Lozano and Huisingh 2010) which can lead to issues of trade-offs between the pillars during decision-making (Giddings *et al.* 2002).

A further criticism of the guidelines is that they allow for the organization to determine the level of 'compliance' with the guidelines, that is, whether to report against the full

GRI framework or to phase in reporting as they self-determine (GRI 2006 p. 5). Whilst it is recommended that organizations self-declare their level of application (A, B or C), this approach still allows organizations to 'cherry-pick' the data and it can lead organizations to focus on those activities at which they are performing better and which provide better reputation (Bebbington *et al.* 2008; Guthrie and Farneti 2008; Hedberg and von Malmborg 2003).

This type of reporting was clearly shown in an Australian study that examined the level of sustainability reporting against GRI indicators by a sample of Australia's top 500 companies (Frost *et al.* 2005) who produced discrete sustainability reports. It was found that the average number of GRI categories disclosed was 7.24 for discrete reports and 6.28 for corporate websites (against a possible total of forty categories as detailed in the GRI, 2002).

There was also found to be huge variations amongst companies sampled as to their levels of compliance. For example, BHP Billiton reported against twenty-four of the forty possible GRI indicators while Hanson, Fletcher Challenge and MacMahon Holdings each reported against only three of these indicators (p. 94). It was concluded by Frost *et al.* (2005) that reporting in Australia against the GRI guidelines is inconsistent and there are frequent gaps in the types and levels of sustainability reporting.

A further criticism of the framework is its development basis. The framework is purposely designed to be applied to organizations of any size, sector or location (GRI 2006). However, smaller organizations have found the guidelines too complicated, overly burdensome and demanding whilst potential users of GRI reports find them insufficiently specific or standardized (Brown *et al.* 2009). Further, the framework was designed based on the experience of use in the private sector (GRI 2005 p.11). To apply a private sector framework to public-sector organizations, is 'clearly a challenging task' (GRI 2004 p. 4).

Dingwerth and Eichinger (2010) in their study on the underlying policies and principles of the GRI concluded that the GRI reporting principles offer only soft guidelines for preparing a sustainability report. They found a lack of precise definitions and a lack of

comparability between GRI reports with the information that is provided in the reports of limited practical use. Whilst Hussey *et al.* (2001), in evaluating the environmental reports of nine global corporations against the GRI guidelines, found no company provided adequate data on all GRI reporting elements. Moreover, they were unable to determine if any company were actually moving in the direction of sustainability.

Further, a growing number of commentators has concluded that the GRI guidelines represent a source of fundamental confusion over what actually constitutes sustainability and they fail to address directly the real issues of sustainability (Guthrie *et al.* 2009; Isaksson and Steimle 2009; Archel *et al.* 2008; Milne *et al.* 2008; Gray 2006a and b; Gray and Milne 2004, 2002).

These criticisms highlight the numerous issues that surround the GRI guidelines as a reporting framework. Granted, most frameworks are not without their critics. However, with the emphasis that this framework places on the suite-of-indicators reporting approach and the varied issues in doing so, with its developmental foundations grounded in the private sector, utilizing this approach in developing a framework for local government would appear to be inadequate. The GRI have recognized these limitations with the development of a sector supplement specific to public agencies. This supplement, whilst at pilot-stage has been designed to assist the public sector in the development of sustainable development reporting.

3.4.1.3 Public Agency Sector Supplement (PASS)

With its release in 2005, the PASS was designed to complement the GRI guidelines (GRI 2005 p. 4) by providing extra resources for public sector organizations in the development of a sustainability reporting framework specific to their sector. These additional requirements will now be discussed followed by an analysis of the criticisms that have been levelled at the supplement since its development.

3.4.1.4 Additional Reporting Requirements of the PASS

The PASS provides a number of additional disclosures and elements that are specifically tailored to public agencies (Table 3.2). Such disclosures include the reporting of key

public policies, priorities and implementation measures in relation to sustainability (GRI 2005 p. 13). The additional disclosures are meant to '*help report readers understand the process by which sustainable development policies were prioritized, how related implementation measures were developed, and how progress is being monitored and measured*' (p. 33).

Table 3.2
Disclosure Elements for Public Agencies

Number	Disclosure Element
PA2	Definition of Sustainable Development used by the public agency and identify any statements or principles adopted to guide sustainable development policies.
PA3	Identify the aspects for which the organization has established sustainable development policies.
PA4	Identify the specific goals of the organization for each of the aspects identified in PA3 above.
PA5	Describe the process by which the aspects and goals in both PA3 and PA4 were set.
PA6	For each goal, provide details on the implementation measures, results of relevant assessments, targets and key indicators used to monitor progress, description of progress, actions to ensure continuous improvement and any post-implementation assessment and targets for the next time period.
PA7	Describe the role of and engagement with stakeholders with respect to the items disclosed in PA6.

These six elements (Table 3.2) are quite useful in providing particular background information to the sustainability report in the public sector. They provide a core set of elements that discuss such issues as the definition of sustainable development utilized by the organization, sustainable development policies that have been developed and short-term and long-term goals and the strategies, targets and actions required to meet these goals.

In addition to the new disclosures, three new indicator aspects have been provided in the PASS to meet the specific reporting needs of public agencies. Two aspects are in the area of economic performance, being expenditures and procurement practices with the third aspect in the area of social performance being administrative efficiency. Commentaries have also been added to some of the existing indicators to explain how to interpret them in the context of the public sector.

With public sector sustainability research still very much in its infancy, only time will tell if these additional disclosures and indicators will provide the needed resources to assist the public sector in the development of a reporting structure. In a recent GRI review (Tort 2010), discussion highlighted the prospect of progressing the pilot-version of the PASS to a final version. In doing so, it was suggested that a final version should encourage improved sustainability reporting by public agencies (p. 12). From preliminary research, however, the initial conclusions that have been drawn consider the supplement to be too generic and inadequate for public service organizations (Farneti and Guthrie 2009; Guthrie and Farneti 2008). These criticisms will now be discussed in view of utilizing such a framework in local government reporting.

3.4.1.5 Criticisms of the PASS

Since its development, perhaps the main objection to the PASS has been its development basis - being the GRI guidelines. The supplement was developed by building on the GRI guidelines and was always intended to add to, but not to replace, them. With the GRI guidelines being modelled on the private sector (GRI 2005 p.11), the guidelines have been developed on different objectives, different operating environments and different scopes compared to the public sector (Simpkins 2006; Ball 2004a). These differences will then flow into how sustainability programs are developed and how sustainability is reported (Ball 2004a). If the original framework of the PASS has not been developed from a public sector perspective; no matter what additional reporting requirements are provided for under the PASS, the supplement cannot be expected to meet the individual needs and requirements of public sector organizations. A further issue with the PASS guidelines is the ability of the supplement to be blended together with the GRI as one reporting framework for public sector entities. However, with the small number of additional disclosures and indicators that are required through the PASS, it is assumed that there would not be a major issue.

As previously stated by Moneva *et al.* (2006), one of the key criticisms of the GRI framework was the lack of an integrated framework through the reductionalist approach

with three separate indicator pillars. Attempts are made to correct this discrepancy in the PASS (GRI 2005), as follows.

> *'In addition to the specific indicators relating to the economic, environmental, and social impact of the agency, there may be cross-cutting indicators that relate to more than one element or more than one agency. The reporting agency is encouraged to include such measures in their report and should refer to the Guidelines for further guidance on cross-cutting and integrated indicators'* (p. 47).

However, a thorough search of the guidelines has not provided any further enlightenment on these cross-cutting and integrated indicators. This was an opportunity for the PASS to provide leadership and to promote an integrated framework. Unfortunately, it does not appear to have been successful in doing so.

Further objections to the guidelines include the inadequate attention given to the central issue of policy responsibilities and impacts (Ball and Grubnic 2007). This view was supported by the National Audit Office (UK) (2005) which argued that the supplement would need further adaptation because of its focus on disclosure of operational activities rather than on a broader strategic and policy approach (p.7-9).

An additional objection to the guidelines was the insufficient number of sector-specific variables making the PASS too generic (Guthrie and Farneti 2008). With the three different public sector levels that exist today in Australia, (Commonwealth, State and Local Government), perhaps a PASS that was able to meet reporting needs across all levels of the public sector was far too ambitious from its conception. Taking these criticisms into account, though, the PASS does provide a number of disclosure reporting elements specific to public agencies that could provide assistance in the development of a local government framework. These elements, as previously indicated in Table 3.2, include the reporting of the sustainable development definition utilized by the organization, those aspects for which the organization has developed sustainable development policies and the linking of the aspects to the specific goals of the organization.

Development of a Local Government Framework

Contribution Number 2: PASS – Reporting Disclosure Elements

Further reporting disclosures that may contribute towards a local government framework are contained in the GRI guidelines themselves. While the focus of the GRI is the performance indicators, there are two other forms of disclosure that are included in the GRI guidelines –strategy and profile disclosures and management approach disclosures. The strategy and profile disclosures provide disclosures that set the overall context for understanding the organization's performance. Such disclosures include a statement about the relevance of sustainability to the organization, description of key impacts, risks and opportunities and the organizational profile. These disclosures could provide assistance in the development of a framework for local government authorities.

Development of a Local Government Framework

Contribution Number 3: GRI (2006) – Strategy and Profile Disclosures

3.4.2 Other Frameworks Available

Other international frameworks are also available for use by public sector organizations though not as commonly known as the GRI or PASS. In this study a further three frameworks are explored – the balanced scorecard, the ISO 14000 series and the AccountAbility AA1000 series. An overview is provided of these frameworks with discussion on their relevance to local government sustainability reporting and any possible contributions they may provide towards a local government reporting framework.

3.4.2.1 The Balanced Scorecard

The balanced scorecard approach (Kaplan and Norton 2006, 2001b and c, 1996, 1992) is an internal management tool that has four main foci aimed at providing management with key financial and non-financial performance measures. The scorecard looks to that of:

- A financial perspective (‘what are our shareholder expectations for financial performance’),
- A customer perspective (‘how do customers see us’),
- An internal business process perspective (‘what must we excel at’)
- A developmental perspective (‘can we continue to improve and create value’).

The scorecard then breaks down each of these perspectives into goals, indicators, targets and tasks. Whereas the financial perspective is intended to measure short-term shareholder-orientated objectives, the other three perspectives are argued to enable an understanding of the drivers of future performance by focusing on longer-term goals and objectives of the organization (Youngblood and Collins 2003). Why this expanded reporting focus is necessary is explained by Kaplan and Norton (1996):

> *‘…financial measures tell the story of past events…. These measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology and innovation’* (p.7).

Through the use of the scorecard, it was envisaged that such an approach would eventually become the basis for external reporting, as management became more experienced internally in utilizing the scorecard. Although a useful internal reporting mechanism, one of the main concerns in utilizing this system for sustainability reporting is that of sustainability reporting itself –the focus of the scorecard does not explicitly recognize sustainability issues (Moller and Schaltegger 2008). While it goes beyond that of just a financial focus, the focus is on issues other than sustainability.

To counteract this, a number of researchers has examined the extension of the scorecard to incorporate an integrated sustainability perspective (Schaltegger 2010; Hubbard 2009a; Moller and Schaltegger 2008; Schaltegger and Wagner 2006; Yongvanich and Guthrie 2006; Figge *et al.* 2002; Zingales *et al.* 2002; Epstein and Wisner 2001a and b) by either integrating into the existing four pillar perspective, or as an additional pillar or as a

separate sustainability scorecard or incorporating the scorecard into an extended reporting framework. With the scorecard largely as an internal management tool, the difficulty is broadening the scorecard to encompass the requirements for an external focus.

Schaltegger and Wagner (2006) discussed this issue in examining how the sustainability balanced scorecard could be linked to external sustainability reporting. They regarded this as a natural progression to the scorecard allowing for a change in approach to sustainability reporting. Most current approaches commence from an external focus with strong influence from media and public debate. However, the scorecard approach, involves an inside-outside focus with an approach that commences from within the organization. A number of steps were proposed – these include identifying the sustainability aspect exposures of the business, analyzing those aspects that are relevant to the business's success and linking these aspects to the organizational goals and activities with the development of key performance indicators to measure and report on performance. However, Zingales and Hockerts (2002) in a review of current practices of integrating social and environmental issues into the balanced scorecard approach found limited numbers of companies using the scorecard correctly with even less integrating social and environmental issues into it.

One further issue in examining the balanced scorecard is that of assumed applicability to the public sector. The scorecard was originally developed for use in the private sector. Kaplan and Norton (2001a), in reviewing this issue by case-study approach, concluded that the fundamental issues of the scorecard could be extended across all business sectors including non-profit organizations, national and local governments by possible modifications and adjustments to the scorecard. Dodor *et al.* (2009) concurred with this viewpoint in developing a Governmental Organizations Balanced Scorecard approach but recommended that this research stream is insufficiently developed and future studies are critically needed.

In examining studies that have focused on the public sector, Hoque and Adams (2008), in conducting an Australian Commonwealth and State public agency study, found that whilst 93.5% of mail survey respondents were familiar with the balanced scorecard

approach, only 30.4% (fourteen respondents from a total of forty-six) were formally utilizing it. Further, of balanced scorecard performance measures being used, it was found that sustainability, environmental or social responsibility measures were being used the least. They concluded that the public sector is not setting a good example. However, it must be noted that this research focused on Commonwealth and State public agencies only, not local government.

Perhaps local government is different – Chan (2004) examined this issue by conducting a mail survey to determine if the balanced scorecard was being utilized in local government organizations across the USA and Canada. A total of 184 questionnaires were returned (from a sample size of 908), with 40% of respondents having heard of the balanced scorecard, with only fourteen respondents (7.5%) having implemented it. Only two respondents considered that they were advanced users of the scorecard with the remaining twelve ranging from novices to intermediate users. No discussion was provided, however, on how these organizations implemented or utilized the scorecards – for example, was the implementation combined with other reporting systems, did the scorecards play a role in external reporting and how so or were they used simply as an internal management tool? In a recent study, Farneti (2007, 2009) focused on the implementation of the balanced scorecard model within a specific Italian local government setting. It was found that the general scorecard model was not appropriate to local government, rather a specific contextual model was created and modified to take into account the local government context. Again, though, no discussion was provided on if the scorecard was utilized in the external reporting processes of the local authority at all.

Whilst Burritt *et al.* (2009), in examining influences on sustainability accounting in the public sector, consider a public sector balanced scorecard has potential; without further investigation it is difficult to determine the success or otherwise of the scorecard in its implementation within the public sector. In examining the scorecard, whilst its original focus was that of an internal management tool, it is slowly being extended to external reporting. The focus of the scorecard is quite useful in that it commences from an internal management focus in moving to an external focus. Aspects of the scorecard could

provide assistance in the development of a reporting framework for local government with particular emphasis on the initial processes in the development of the sustainability balanced scorecard.

Development of a Local Government Framework
Contribution Number 4: Development of the Sustainability Balanced Scorecard

3.4.2.2 The ISO 14000 Series

The ISO 14000 series is a set of voluntary international standards developed by the International Organization for Standardisation (ISO) that focus on environmental sustainability. They provide a framework for the development of an environmental management system and include such areas as environmental auditing, life cycle analysis and environmental performance evaluation, with the main standard being 14001 (http://www.ttbs.org.tt/FAQ-EMS_iso14000.php accessed 04/10/10).

Whilst the number of organizations that has received ISO 14001 certification since its introduction in 1996 has steadily increased, the implementation costs and technical intensity of the standard are preventing many organizations from adopting this standard (Ide 2002). Hillary (2000) and Kirkland and Thompson (1999) concurred with this viewpoint whilst Schylander and Martinuzzi (2007), in a questionnaire conducted on Austrian organizations, found that the average cost to implement such a system was approximately 76,000 euros.

At present, there are no ISO standards in relation to an integrated approach to sustainable development, incorporating the three elements of sustainability[6]. Adams and Narayan (2007) argued that despite there being no sustainability reporting standard, the current environmental standards could provide a platform from which sustainability issues could be further developed by organizations. Further, Emilsson & Hjelm (2009), in an

[6] In 2010, the ISO did release a guidance standard on Social Responsibility (ISO 26000).

exploratory study of three Swedish local authorities, concluded that the ISO 14000 management system could be expanded further into a broader sustainability management system approach.

One major issue in utilizing the ISO 14000 series for sustainability reporting is whether the series could be extended to provide a reporting platform beyond that of development of a management system. Morhardt *et al. (*2002) in examining this issue conducted a review of voluntary environmental reporting disclosures against ISO 14031 (part of the ISO 14000 family) and the GRI utilizing a scoring system. In the study across four industrial sectors, it was found that environmental reporting disclosures utilizing both systems was at very low levels (with the ISO series reporting the lowest level of an overall average of 13.4 points normalized to a maximum of 100 points).

Castka and Balzarova (2008) concluded that one cannot expect that ISO standards alone can solve global sustainability problems. Adams and Narayan (2007) believed that whilst the standard could provide a platform for sustainability, the standard needed to be implemented alongside other guidelines such as the GRI guidelines to provide a comprehensive reporting framework. Holland and Gibbon (2001) examined the linkages between the ISO 14000 series and the GRI framework. They established that the series is a reflection of what is contained in the GRI reporting elements (from general categories through to specific issues). They concluded that by following the 14000 series, organizations would be able successfully to report using the GRI guidelines by stating:

> *'It is likely, therefore, that any organization that has a formal environmental management system that in some way follows ISO 14000 (either by accreditation or by informal constitution) will also recognize and be able to apply the GRI guidelines'* (p. 285).

With the ISO series being primarily concerned with the development of environmental management systems and being linked to the GRI reporting guidelines[7], the ISO series will not be utilized in contributing towards a reporting framework in local government.

3.4.2.3 AccountAbility AA1000 Series

This series of voluntary standards comprises the AA1000 Framework, the AA1000 Assurance Standard and the AA1000 Stakeholder Engagement Standard. This series provides a framework that can be used to understand and improve ethical performance and as a means for users to judge the validity of claims to be ethical. These standards do not focus on an integrated viewpoint of sustainability but rather on one specific component of sustainability, ethical and social aspects of accounting. Lozano and Huisingh (2010) in assessing different tools for sustainability reporting, considered this to be one of the main disadvantages of the AA1000 framework in that it does not explicitly consider the economic and environmental dimensions of sustainability.

However, Adams and Narayan (2007) considered a more pertinent factor is that the standards provide little guidance on what should be reported, rather focusing on the reporting processes of an organization. As stated by the Standard AA1000 (1999, p. 1), the standards were not designed to provide details on what should be reported – rather, they are concerned with the quality of the reporting process. The AA1000 framework provides a number of principles which underpin the standards and are used to guide the quality of reporting. By utilizing such an approach, it has been commented that the framework is more of a quality assurance framework than a standard as it does not provide any detailed reporting metrics (Dixon *et al.* 2005; Zadek, 2001a).

To ensure a quality reporting framework, though, the framework must be guided by common principles that guide the reporting process. The AA1000 standards are developed through a hierarchical three layer approach with the third layer encompassing a number of reporting principles. These principles include but are not limited to comparability, reliability, relevance and understandability.

[7] The conclusion was previously reached in Section 3.4.1.5 that the GRI guidelines can provide assistance in the development of a local government framework (Contribution Number 3).

Such reporting principles also form the qualitative characteristics of the Australian Accounting Standards Board's *Framework for the Preparation and Presentation of Financial Statements* (Framework) (AASB 2004 paragraph 8) which are to be applied to financial statements of business reporting entities both within both the private and public sectors. However, through the application of the AA1000 standards, these principles are widened beyond financial reporting to include ethical and social reporting. Whilst important, the framework is lacking in reporting guidance or reporting principles for ethical and social reporting. Therefore, for the purposes of a sustainability reporting framework for local government, this framework will not be considered any further.

Specific frameworks that have been developed for the public sector are now discussed.

3.5 Specific Frameworks in the Public Sector

Although not as well known or utilized as the other international guidelines, the following frameworks represent attempts at developing frameworks that are specific to the public sector. They are discussed in the context of providing input into the development of a framework for local government in Australia.

3.5.1 Public Sector Sustainability Reporting Frameworks

Kaye *et al*. (2003) developed the Sustainability Framework for Policy and Program Planning and Implementation to be used primarily by public servants. They argued that sustainability needs to commence at the policy and planning stage of any organization and that sustainability reporting is just part of a broader framework that integrates the sustainability goals of the organization into policy and program development.

No detail was provided on how to report effectively on sustainability. Rather, evaluation criteria were provided to self-assess policies and programs against social, environmental, economic and governance sustainability aspects. Further, discussion was provided on how the criteria could be utilized in evaluating new policy or program initiatives. For example, it was suggested that the framework could be utilized to determine how well new policy initiatives meet relevant government policies, commitments and legislation and sustainability over the medium to longer term of expected outcomes on newly

developed program initiatives. In the development of a reporting framework for local government, these evaluative criteria may be useful in providing a basis in the initial planning and development of a reporting structure.

Development of a Local Government Framework
Contribution Number 5: Kaye *et al.* (2003) – Evaluation Criteria

The Chartered Institute of Public Finance and Accountancy (CIPFA) (2006) developed a sustainability reporting framework specifically designed for the UK public sector. The framework consists of a number of sequential steps in the development of a sustainability report. Similar to the GRI Guidelines, the CIPFA framework is built on the application of indicators to measure sustainability. It recommends that an organization needs to determine first what needs to be measured in relation to sustainability performance and then design measures through indicators for each key area of performance. The framework provides guidance on where to access existing sets of indicators rather than creating new indicators. Suggestions include specific UK national and local authority indicators[8], including indicators designed for Scotland and Wales and the GRI framework. However, before decisions can be made on what to measure in an organization, a framework needs to be developed that examines such issues as what does sustainable development mean to an organization, what are the goals and objectives of the organization and how can these goals be achieved whilst achieving sustainable development. Further, whilst providing a number of suggestions for indicator sets as a basis for reporting, there is little analysis conducted or referred to in determining whether the suggested sets are suitable for the public sector environment in the UK. In utilizing this approach, it does little towards the development of a consistent and comparable framework in the public sector.

The CIPFA framework appears to be more focused on the practical application of preparing a sustainability report without providing the theoretical structure required for a

[8] Including such indicators sets as the UK National Framework Indicators, Local Quality of Life Indicators and Best Value Performance Indicators.

sound reporting framework. The report, however, does provide useful guidance on the structure of sustainability reports (drawn from the GRI 2006) and steps to go through in the creation of a sustainability report. These elements could be useful in the application of the local government framework once developed.

Development of a Local Government Framework

Contribution Number 6: CIPFA (2006) - Structure of Sustainability Reports

Hughey and Coleman (2007) developed a sustainability planning and reporting framework for a rural-based New Zealand local authority. This framework was developed by case-study approach working with the authority through a project steering committee. The proposed framework was based around a quadruple bottom line and management reporting approach focusing on environmental, social, economic, cultural and management factors. There was a number of steps involved in the development and implementation of the approach. These involved, in principle, the defining of the term 'sustainable development' and the development of goals, specific objectives, indicators and targets for each of the five core areas of sustainable development. The reporting framework was then based around these core areas through the use of indicators in achieving set targets for each objective. Whilst being quite simple in approach, the development of the framework was found to be fraught with challenges which led, ultimately, to the reporting system not being implemented by the local authority. A review of this framework raises two important issues, as previously discussed in the review of the GRI framework; the obstruction of an integrated view of sustainability by treating each of the five core areas as separate areas and the heavy reliance on the use of indicators to report on sustainability. Therefore, for the purposes of this study, this framework will not be further examined.

Within Australia, there has been a number of sustainability reporting frameworks developed at either the local or State level geared towards sustainable development. These are now discussed.

3.5.2 Australian Sustainability Reporting Frameworks

- The City of Melbourne in conjunction with the International Council for Local Environment Initiatives (ICLEI) developed a TBL Reporting Kit specifically designed for local government (2002).

  The Reporting Kit is a set of checklists, guidelines and case studies that focus on the decision- making aspects of council. It aims to evaluate proposals going before council; decisions to approve capital works projects; and demonstrate a process to integrate TBL into corporate planning (City of Melbourne & ICLEI 2002). Whilst it provides detailed procedures, questionnaires and flow-charts for completing sustainability assessments for decision making by council, it does not provide a clear reporting framework for councils to report against. Without this framework, local authorities will be left to create their own reporting frameworks which could lead to inconsistencies and incompatibilities in reporting. Therefore for the purposes of this study, the kit is not considered relevant and will not be examined further.

- The Public Accounts Committee (2005) in reviewing sustainability reporting in the NSW public sector, recommended that a whole-of-government framework for sustainability reporting be introduced for the NSW public sector. It suggested that existing reporting frameworks be utilized including as examples the GRI guidelines, the Western Australia State Sustainability Strategy (WASSS) and the Decision/Practice Model. In reviewing the WASSS and the Decision/Practice Model, it was found that both provide basic reporting frameworks but with little detail. For example, the WASSS framework is based upon the development of reporting indicators - the strategy document provided five indicators as a guide and stated '*additional work will be required to develop a suitable set of integrative headline sustainability indicators for Western Australia*' (Government of Western Australia 2003 p. 78).

  The Public Accounts Committee suggested that a common set of indicators be developed to assess the sustainability effects. Indicators were provided which were drawn from GRI indicators and those used in a number of NSW and Australian

government agencies. It was also further advised that individual agencies were encouraged to develop their own specific indicators for their individual jurisdictions. However, following such an approach would not help the development of a common reporting structure which would ultimately lead to lack of consistency and comparability in reporting.

- In NSW, a sustainability tool, known as the Sustainability Health Check was developed by Cuming & Bragg (2006) to assist local governments in their transition to sustainability. The Health Check's focus is geared towards one component of sustainability, environmental sustainability with sustainability defined in terms of the National Strategy for ESD. However, the Health Check later states;

  > *'…it is not just about the environment. Sustainability is also about the many things we value and need for everyday life, including food and shelter, education and employment, health and welfare services, cultural and recreational activities, transport, water and energy supplies'* (p. ii).

  It is clear, though, with sustainability starting from ESD, the emphasis is placed with the environment.

  The Health Check provides a number of assessment work-sheets with questions that must be answered. These work-sheets can be completed at a basic level with a simple tick-the-box approach or they can be used at a specialist level where a selection of organizational systems is reviewed in more detail to a complete health check where all organizational systems and sustainability outcomes are reviewed. The results from these work-sheets are then combined and integrated into a sustainability health check assessment.

  In reviewing the work-sheets and questions, it was found that the process was quite complex and it was quite easy to get confused by the paper-work. While it would most likely be feasible for councils that are large to complete by passing the many different work-sheets to different departments to complete, if it were left to the sole responsibility of one person, the job would be quite daunting and, possibly,

overwhelming. Further, the process, even though quite detailed in most respects, is ambiguous on the end-result reporting aspect of sustainability – the "How to Report on Sustainability' section of the report is confined to a total of three paragraphs (p. D10) from a total of 133 pages in the report. With the focus of the Sustainability Health Check focusing on internal sustainability assessment, the health check is considered not applicable for the purposes of this study.

3.6 Summary

From an examination of the above reporting systems and frameworks, there exists no framework today that specifically focuses on the reporting of sustainable development designed for local government in Australia. It could easily be argued, though, that such a framework does not exist because the notion of 'one size does not fit all' is applicable with local government organizations being of different localities, different sizes with different foci and at different stages in the sustainable development process. However, to ensure a certain level of accountability and comparability in local government, there needs to be a reporting format that provides a minimum basis of reporting specific to the needs of local government but is yet adaptable to meet the specific needs and issues of individual authorities.

Whilst there have been attempts made, from both an international and domestic focus, the frameworks available are generally either too broad-based, modeled on the private sector or are focused on one specific component of sustainability reporting. Thus, they do not provide an integrated sustainable reporting viewpoint, are too complicated or have too little detail provided for the local government sector in Australia.

Even though the current research focuses on the Australian situation, this framework deficiency is not just confined to Australia. Maclaren (1996), in a review of urban sustainability reporting efforts in North America and Europe, argued that one of the main issues of sustainability at the local level is the absence of a clearly articulated methodology for reporting, which leaves an ad hoc reporting process in its wake.

What is required is a framework that is specific to local government in Australia. The framework needs to provide a minimum basis of reporting for organizations to strive for, to achieve and go beyond in meeting their own individual reporting needs. In examining the current state of sustainability reporting in local government in Australia, this study proposes to develop a broad reporting framework specific to local government authorities. In this chapter, possible elements have been identified which could contribute towards the development of a framework for local government in Australia. To provide a summation of the contributions, they are now summarized in Table 3.3.

Table 3.3
Possible Contributions Towards a Local Government Reporting Framework

Number	Source	Description
1	National Strategy for Ecologically Sustainable Development (ESD)	Incorporation of sustainable strategies into strategic planning and reporting
2	PASS	Reporting Disclosure Elements
3	GRI (2006)	Strategy and Profile Disclosures
4	Balanced Scorecard	Development of the Sustainability Balanced Scorecard
5	Kaye *et al.* (2003)	Evaluation Criteria
6	CIPFA (2006)	Structure of Sustainability Reports

These elements identified will be considered further in Chapter 9 in discussing the results and conclusions of this study. Initial considerations towards the development of a reporting framework specific to local government are now discussed.

3.7 Local Government Framework for Sustainability Reporting

A framework for local government sustainability reporting in Australia needs to ensure that it meets the needs of the local government sector- to be specific enough to guide local government but yet general and adaptable enough to adapt to meet individual local needs. The GRI guidelines, whilst regarded as the major source of guidance for sustainability reporting today, have been explored and are considered not to be suitable for local government. These guidelines are hindered by a number of criticisms with perhaps one of the key criticisms being their reliance on the suite-of-indicators approach. This approach, though, is not specific to the GRI. Numerous guidelines/frameworks

being developed today are centred on the theme of the use of indicators as the basis for sustainability reporting.

However, following this approach can lead to reductionism and the eradication of an integrated viewpoint of sustainable development (Moneva *et al.* 2006). As Larrinaga *et al.* (2002) and Owen *et al.* (1997) point out, by reducing sustainable development to a set of indicators, the GRI guidelines are viewed as an administrative reform rather than a framework to lead to sustainable development. Further criticism of these indicator sets was argued by Mitchell (1996) when he concluded that they can be difficult to understand and are often poorly supported by the required data.

On a global level there are now over 500 sustainability indicator sets with no universal set prevailing (Ciegis *et al.* 2009) which has lead to some considering that the abundance of indicator sets and metrics has lead to an 'indicator industry' (Herzi and Nordin Hasan 2004). Perhaps, though, as Tanguay *et al.* (2010) point out, this wealth of indicators sets has been brought about by the absence of a more universally accepted definition of sustainable development. There being no one accepted definition has lead to multiple interpretations of the term which has triggered an explosion of indicator sets.

Although criticisms have been leveled at this approach, indicators do have a valuable role to play in sustainability reporting. Gahin *et al.* (2003) believed that they provide critical information about current trends and conditions, help to track progress towards community goals and serve as a vehicle to generate community consensus about what is important. Cornel and Mirela (2008) considered that indicators can point the way to a better future and Dalal-Clayton and Bass (2002) observed that indicators do potentially provide more transparency, consistency and were more useful for decision making than other approaches but stated that this was contingent on how well the indicators were designed and executed. Mitchell (1996) raised this issue also in concluding that whilst indicators are useful if designed with care and used properly, they can also be used to mislead and misinform.

With the major source of guidance available today using suite-of-indicators assessments (GRI 2006) and the criticisms that have been leveled at the use of this approach, there are

doubts as to the benefits this approach is having or can have towards sustainable development (Dumay *et al.* 2010; Wilson *et al.* 2007; Hueting and Reijnders 2004). Pinfield (1996) concluded that there is little evidence of indicators leading directly to the formulation of policies for sustainable development. MacGillivray and Zadek (1995) believed that the obsession with improving measurement through the use of more developed and refined indicators is becoming an excuse for delaying action towards sustainable development.

While indicators are not without their critics, they do have a role to play in identifying, quantifying and helping to explain the economic, social and environmental performance of an organization. They need, though, to be utilized in a form that is beneficial and that contributes to the development of sustainable development reporting rather than creating complexity and misunderstanding through an array of indicators. Epstein (2008) concurred with this viewpoint in stating that care needs to be taken to be selective in the choice of indicators and to balance a desire for more complete information with a need to keep it understandable and useful. He concluded that in many cases, the presented data are so extensive that it is difficult to get a clear understanding of sustainability performance. Whilst Wilson *et al.* (2007) considered that information provided by sustainable development indicators provides an incomplete picture at best and needs to be complemented with other decision support tools, models or studies to be more effective.

A potentially more suitable approach that could be utilized for local government reporting involves the use of indicators but where they are used to complement and provide evidence rather than to drive sustainability reporting. Such an approach could involve the usage of descriptive assessments with indicators providing the secondary role. By utilizing qualitative assessments, Lamberton (1998) argued that they can be used to add richness and context to reports. With sustainability needing to focus on the longer term rather than the shorter term, such an approach could be usefully applied in the telling of this journey towards the goal of sustainable development through the use of descriptive assessments with indicators utilized to supplement and complement.

Development of a Local Government Framework

Contribution Number 7: Reporting Approach
Descriptive Assessments(primary) with indicators (secondary)

3.8 Summary

This chapter has examined a number of Australian and international guidelines/frameworks available to assist local government organizations in their pursuit of sustainability reporting. Possible contributions have been identified from these frameworks towards the development of a local government framework in Australia. These contributions will be explored further in Chapter 9, in discussing the results and conclusions of this study.

In the next chapter, a review of the academic literature on sustainability reporting in the local government sector is conducted.

Chapter 4 Sustainability Research in the Local Government Sector

4.1 Introduction

In this chapter, five specific research questions are developed. These questions are developed from a review of the literature. Hypotheses are subsequently developed to respond to these questions. The five research questions are as follows.

- To what extent are sustainability activities being reported by local government authorities?
- Are there differences in the level of sustainability reporting between urban and rural local government authorities in Australia?
- What are the key factors leading to the adoption of sustainability reporting within local government authorities in Australia?
- Are accountants being utilized in sustainability reporting in local government authorities in Australia?
- What sustainability frameworks are currently being adopted by local government authorities in Australia?

For each research question, the sustainability literature will be discussed in terms of local government research undertaken from an international perspective and then research undertaken specific to Australia. Where applicable, LA21 research that has been conducted is also discussed. Whilst LA21 has a more restricted focus on sustainability, it has been a key catalyst in promoting and commencing the sustainable development agenda in local authorities (Keen *et al.* 2006; Ball 2004a; Neil *et al.* 2002; Cotter and Hannan 1999).

4.2 Research Question 1: To what Extent are Sustainability Activities being Reported by Local Government Authorities?

Research into sustainability reporting has been largely geared towards the private sector rather than the public sector (Guthrie *et al.* 2010; Ball and Grubnic 2007; Ball 2006a; Dickinson *et al.* 2005) with local government sustainability reporting research still very much in its infancy. Local government research is discussed initially from an international focus followed by research specific to Australia.

4.2.1 Sustainability Reporting in Local Government – International Focus

Research that has focused on sustainability reporting in the local government sector from an international perspective include the Centre for Public Agency Sustainability Reporting (Dickinson *et al.* 2005) who examined the up-take, forms and practice of sustainability reporting by public agencies internationally. The study involved distribution of a questionnaire to a list of targeted contacts and networks of Centre Collaborators (for example, GRI, ICLEI, the City of Melbourne and the State of Victoria).

Sixty questionnaires were received by the submission date of 30 June 2005 which included responses from Australia, New Zealand, the United Kingdom, Canada and the USA. A snowballing technique was used to distribute the questionnaire. In adopting this approach, those who received the questionnaire were requested to distribute it to others. Using this method, the number of questionnaires that was actually distributed in the study was never fully known. In utilizing this informal process of data collation, with no sampling frame in place, response bias could have been introduced into the survey process. Of concern is that some respondents may not have been representative of local government authorities. This approach can also raise questions regarding the accuracy of measurement in that whether what the questionnaire intended to measure was actually measured and whether the results could be replicated (Golafshani 2003). However, it must be noted that the questionnaires were supplemented with qualitative informal discussions with a further twenty-two organizations, thus helping to increase the reliability of the study's results.

Of the questionnaire respondents, the highest response rate was from local authorities, which constituted 58% of respondents (thirty-five). The next highest response rate was from Federal authorities and then State or regional authorities. Australia was the region most represented in the survey responses, representing a total of 55% of all responses (thirty-three).

In examining the results of the study, 67% of respondents (forty) had completed reports that they perceived could be identified, either internally or externally, as a sustainability report. However, it was clear from the survey responses, that there is a lack of clarity over what constitutes sustainability reporting in the public sector with reports being produced on an ad hoc basis with a wide variety of reporting practices. The questionnaire allowed respondents to self-identify what constitutes 'sustainability reporting', rather than providing a definition from which respondents could assess their sustainability work and then determine if they met that definition. Respondents identified a range of reporting activities that, to them and their audiences, represents sustainability reporting (Leeson and Ivers 2005).

Sustainability reporting was incorporated into expanded annual reports, expanded SoE reports and stand-alone sustainability reports. In an analysis of types of report by type of organization, significant statistical results were found in that local authorities were more likely to produce expanded SoE reports containing sustainability information and less likely to produce expanded annual reports (Dickinson *et al.* 2005 p. 33).

The GRI (2004) provided a limited qualitative overview of international sustainability reporting practices in the public sector. Information was sourced from reports released by public agencies, reviews of secondary literature, telephone interviews and written comments from experts and practitioners in the field of public agency reporting. Interviewees were primarily drawn from Australia, Canada, Germany, Hong Kong, Italy, Mexico, New Zealand, the United Kingdom and the United States of America. It was concluded that whilst sustainability reporting is happening at multiple levels of government, there is tremendous diversity in sustainability reporting which has resulted in inconsistent approaches with most sustainability reports found to have a specific focus,

and few reports providing a holistic view of sustainability. In a further GRI review, Tort (2010), in examining GRI reports prepared by public agencies, concluded that sustainability reporting in the public sector continues to be an emerging field.

In 2002, the Ministry for the Environment (New Zealand) established pilot groups for central and local government participants interested in TBL accounting and reporting (TBLR)[1] with the main aim to assess whether or not there was value in promoting TBLR in the public sector. Nine central government agencies and eight local authorities participated in the pilot groups.

Of the participating local government authorities, seven, by the end of the pilot program, had moved towards embedding TBLR into their organizations. Local government participants felt that whilst reporting for its own sake was pointless, a TBL approach was needed to be used to drive change in an organization by building on existing strategic planning processes and performance measures (p. 28). Participants commented:

> *'It facilitates development of a more relevant and integrated monitoring and measurement framework' (p. 29).*
>
> *'…as councils have such broad involvement it is easy to lose what is really important within the current reporting framework. TBL forces the question (about what is really important) to be asked and answered' (p. 29).*

4.2.2 Sustainability Reporting in Local Government – Australian Focus

There has been limited research focus into sustainability reporting in the public sector from the Australian context. From a broad public sector perspective, such studies have included that of Gibson and Guthrie (1995), Burritt and Welch (1997), Frost and Seamer (2002), Frost and Toh (1998a and b), Lynch (2010) and Lodhia (2010) who specifically focused on environmental reporting disclosures and procedures in Commonwealth and/or

[1] Discussions amongst participants highlighted that there is a range of interpretations of the term, TBLR. For the purposes of this research, rather than utilizing a specific definition, a number of key elements were identified as being core elements in the TBLR approach.

State departments and agencies[2]. In focusing specifically on research from a local government perspective, research is further restricted. Such research is now discussed.

In 2005 a study conducted by Jones *et al.* investigated sustainability/TBL reporting in Australia. The study covered private sector entities, Commonwealth and State government business enterprises and local government authorities. It focused on the nature and the extent of sustainability reporting by these entities. The study also provided an analysis of the disclosures by the private sector sample against GRI indicators.

In generalizing the results of this study, caution needs to be exercised as the scope of the study was limited to thirty-five councils drawn from a sample population of 721 local government authorities in Australia (as at 30 June 2003). This represented just 5% of the local government population. A further limiting factor of this study was the minimal analyses of the public sector results. Attention to local government was cursory as the focus of the report was on the private sector with findings incorporating financial and market analysis and disclosure practices. As a result, this study provided limited evidence into sustainability reporting in the local government sector.

In focusing on the results from the local government sample, results suggested that few councils in Australia report on their sustainability performance, rather confining their sustainability disclosures to general statements of policy. It was found that there was very little consistency between the types of report containing sustainability information, which even flowed to councils operating in the same States that operate within the ambit of State and Territory law and regulation. Sustainability information was found in a mixture of reports including SoE reports, annual reports, community reports and budget statements.

Farneti and Guthrie (2009), using semi-structured techniques, interviewed officers from a group of Australian public sector organizations that had prepared sustainability reports using the GRI framework. The group was composed of one Federal department, one State

[2] Gibson and Guthrie (1995) did not explicitly state the type of public agencies they analyzed in their research, other than stating the sample selected included twenty-five NSW government departments and agencies. Therefore, without this specific detail, it was unknown if local government authorities were included in their sample selection and, thus, this study was excluded from further analysis.

department, three local government organizations and two State public organizations. The semi-structured interviews were conducted during January - February 2007 and eleven people, being the key preparers of the organizations' sustainability reports were interviewed across the seven organizations. Interviewees considered that whilst the annual report was a valuable communication device, it was just a number of reporting media reporting on sustainability (as also discussed in Guthrie and Farneti 2008). Other media utilized included stand-alone sustainability reports and internal documents such as strategy documents, operational plans, council minutes and publicly available scorecards.

In a review of annual and sustainability reports in the 2005/2006 financial year (Guthrie and Farneti 2008), it was found that the greatest number of sustainability disclosures were labour practice disclosures (which accounted for 54% of possible GRI and PASS reporting elements[3]) with public agency disclosures at 43% and environmental reporting disclosures 32.2%. It must be noted, though, due to the small sample size of this study, seven organizations, to strengthen and verify these results it is recommended that further testing be conducted.

Research undertaken by Herbohn and Griffiths (2008) utilized a case study methodology to examine three local government organizations based in Queensland, two metropolitan and one regional, all of which had previously demonstrated a commitment to sustainability reporting. The main sources of data were semi-structured interviews with employees of each authority that were involved in sustainability reporting, documentation and direct observation with a total of ten interviews being conducted.

The case-study councils had a range of sustainability reporting maturities, from planning and implementing some form of sustainability report within the next two years, to publishing a first sustainability report to the publication of a fourth sustainability report. Little consistency was found in the type of sustainability reporting across the three entities. However, it was suggested that this could be explained in terms of each organization's level of reporting maturity.

[3] When results were compared against the total number of possible disclosures contained in the GRI and PASS guidelines.

In a further study, Jigsaw Services (2004) undertook a review on behalf of Adelaide Hills Council, Alexandrina Council and the City of Salisbury in South Australia to identify TBL reporting practices in local government. In an effort to identify local government authorities that were leaders in this field, a review of current TBL practices was conducted on nineteen authorities across four States of Australia (Victoria, NSW, Queensland and South Australia) and New Zealand. It was determined that extensive work on TBL reporting has been conducted in Victoria, in particular the City of Melbourne but there was considerable work to be done in the other States surveyed. However, little analytical detail was provided on the details of the review which, therefore, makes it difficult to determine if a thorough in-depth review was, in fact, conducted. Of TBL reporting found by Jigsaw Services, it was concluded that there was a lack of a consistent approach with local authorities implementing TBL and reporting in numerous ways.

Potts (2004), adopting a case-study approach, analyzed the TBL reporting approaches of four local government organizations in Australia, being Melbourne City Council, Maroochy Shire Council, Sutherland Shire Council and South Sydney City Council. It was observed that there was no definitive standard or best practice approach being utilized by these organizations with each having developed their own reporting processes.

The sustainability reporting evidence available within Australia is quite limited. Most studies have been by case study embracing limited populations and suggesting that the maturity of sustainability reporting is variable. Whilst there has been limited research conducted on sustainability in local government, there has been somewhat higher research interest examining LA21. Although LA21's focus is towards environmental sustainability, it has been a key driver in commencing the sustainable development agenda in local authorities (Keen *et al.* 2006; Neil *et al.* 2002; Ball 2004a; Cotter and Hannan 1999). LA21 research will be examined to provide a broader picture of the sustainable development program in the context of local government.

4.2.3 Sustainability Reporting in Local Government – LA21 International Focus

In 2001, the International Council for Local Environmental Initiatives (ICLEI) conducted a global survey of LA21 aimed at local authorities. This survey was a follow-up to a similar survey conducted in 1997 by ICLEI and the UN Department for Policy Coordination and Sustainable Development (DPCSD).

The survey addressed the extent of LA21 activity, explored the constraints faced by local authorities and documented the support needed for these processes to grow world-wide. Two separate surveys were prepared and distributed. The first was directed at regional, national and international institutions whilst the second survey was aimed at local government bodies. A total of 779 local authorities and local associations responded to the surveys, representing 113 countries with 89% of councils undertaking LA21 processes and 92% of the associations indicating that they were involved in promoting LA21 in some way. It was found that the focus of LA21 processes was more geared towards environmental issues (46%) with 35% of respondents taking a more comprehensive sustainable development approach focusing on economic, social and environmental factors.

Devuyst and Hens (2000) examined by case study technique, how Canadian and Flemish local municipalities manage, measure and report sustainable development initiatives through LA21. In both countries, there was found to be a low up-take of both the LA21 initiatives and reporting across local authorities through an in-depth analysis of three Canadian and three Flemish local authorities. Of these authorities, only one had a full sustainability reporting system in place whilst one other reported results of selected sustainability indicators. These results concurred with a study conducted by Burch (1994) who examined the status of municipal and community based sustainable development reporting in Canada utilizing telephone survey methods. It was concluded that, whilst there were pockets of development, reporting on sustainable development was very much in its infancy in Canadian municipalities. Of what reporting was being conducted, it was found that there was a higher focus on environmental issues. In a further Canadian study, Campbell and Maclaren (1995) examined SoE reporting in Canadian municipalities by

case study and mail survey techniques. They found considerable variation and diversity in reporting approaches and considered that work was required on developing consistent reporting techniques and frameworks that are specific to local needs in an effort to bring about comparability.

Telford (2005) examined the results of a national survey to investigate what local authorities were doing to address environmental management issues. A mail survey was sent to all 468 local authorities within the United Kingdom (UK) with a response rate of 35% (163). Eighty-five percent of all respondents agreed that local authorities have a significant role to play in environmental reform with 28% of respondents (forty-five) producing some form of environmental report for external users with a further 13% (twenty-two) at the time considering producing an environmental report.

Tuxworth (1996) examined the up-take of LA21 in the UK. The Local Government Management Board (LGMB), being the national board for local government in the UK, commissioned two surveys of LA21 in 1994-1995 and 1996. This survey instrument was sent to officers that were primarily concerned with the environment and sustainability issues in every local authority in England, Scotland, Wales and Northern Ireland.

A 57% response rate (309) was achieved from the first survey whilst a 50% response rate (275) was achieved for the second survey. Of the respondent authorities, approximately 72% of the 1994-95 survey respondents (221) and 91% of the 1996 survey respondents (241) were committed to participating in the LA21 process. Of 1996 survey respondents, approximately 25% had completed a SoE report with approximately 60% (165) pursuing SoE reporting in some form – whether it be partial reporting on selective information or planning to prepare such reports in the future.

Tuxworth (1996) found also a strong bias by local governments towards tackling what was termed 'soft environmental sustainability' issues[4]. Examples of such issues include reducing energy use through insulation, reducing litter problems and protecting the amenity of semi-natural landscapes, which were considered now ingrained in most local

[4] Similar findings were found by Burritt and Welch (1997) who focused on Australian Commonwealth entities.

authorities. Tuxworth argued that any attempt to address hard sustainability issues beyond this scope is only just beginning and the challenge will be enormous for all local authorities (p. 294-295).

Lewis (2000) examined environmental audits in 140 UK local authorities over the period 1992-1997. Environmental audits are a means for organizations both to assess the environmental impact of their activities and to report the results of any environmental improvement programmes they have enacted (Gray and Collison 1991).

Two principal forms of environmental audit emerged from the UK national board, LGMB, in the early 1990's. They were SoE reports and Policy Impact Assessments (PIA), which are *'a review of the objectives, policies, services, practices, structures and procedures of the authority and its impact on the environment*' (p. 300). By 1997, fifty-four local authorities in the UK had produced a SoE report or a PIA whilst the remaining eighty-six authorities had not undertaken any form of audit.

In examining the reports from an integrated sustainable development viewpoint (that is, focusing on environmental, social and economic factors), Lewis (2000) found that documentation concentrated on the environmental dimension. Only one local authority had attempted to incorporate social awareness into their reporting. There were signs in some of the later year audit reports that authorities were attempting to address the social strand of sustainability with a number of council initiatives, such as anti-poverty strategies, crime and quality of life considerations, but they were considered to be at very early stages of reporting (with no actual number of authorities provided).

4.2.4 Sustainability Reporting in Local Government – LA21 Australian Focus

In 1996, Environs Australia[5] conducted the National Local Sustainability Survey which was sent to all Australian councils on the issue of LA21. Whilst this research is dated in today's terms, there has been no such comprehensive study undertaken since then in Australia. The study specifically examined the progress of Australian councils in adhering to the suggested timetable of LA21 and the progress made towards a LA21

[5] Being the Australian National Local Government Environment Association.

process. The survey document was sent to 770 councils in Australia with a total of 192 replies being received from local government authorities, representing a 25% response rate. This survey focused on the strategies and policies promoting local sustainability and local council awareness of LA21. The data from this survey formed the basis for a second stage which examined, in more detail, approaches adopted by councils that have implemented LA21 including the development of reporting tools for LA21 processes.

Whittaker (1996) in undertaking this second stage conducted a mail survey between June - September 1996 specifically targeted over 100 local authorities that had previously indicated in the 1996 National Local Sustainability Survey that they were working on LA21 initiatives. Forty-two replies were received from local authorities[6]. Of this total, twenty-five had mechanisms in place to integrate social, economic and environmental policies into their local authorities with seventeen respondents having some form of reporting mechanism to monitor the performance of environmental or sustainability matters.

Fourteen respondents had produced a SoE report to report on environmental matters. Further, twenty-two authorities were in the process of developing environmental indicators and eight were in the process of developing sustainability indicators. Whilst this is encouraging to see, it does highlight the focus on environmental sustainability. Reporting indicators was found to be through a variety of forms, including monthly and annual reports, management plans, media, workshops and seminars.

Mercer and Jotkowitz (2000) focused on the progress made by ten local councils in Victoria towards policies promoting local environmental sustainability. These councils had all previously indicated through Whittaker's (1996) second stage mail survey that they had a LA21 process in place. From a LA21 reporting perspective, what was found was a total lack of consistency and comparability in terms of style of reports, content, issues identified, depth of analysis and recommendations for action. As considered by Mercer and Jotkowitz (2000) '*evaluating the various reports is like comparing 'apples*

[6] No specific documentation could be located that provided the exact number of councils to which the survey document was sent. However, according to Whittaker (1997), 121 councils had indicated that they were working on LA21 initiatives in the 1996 National Sustainability Survey– therefore, it is presumed that the figure was 121, providing a response rate of 34.71%.

with oranges', so different they are in every sense' (p.172). For example, there were thirty-two reports for the ten councils that contained local environmental sustainability information. Of this total, there were thirteen different and distinct reports. The number of chapters in the sustainability reports ranged from 4-27 and the number of pages ranged from 10-197. Further, it was concluded that in none of the councils studied could it be said that a wide ranging environmental program or system was in place.

Douglass (1996) focused on the adoption of environmental management accounting practices in a Victorian local government authority. This authority was selected based on its demonstrated commitment to, and involvement in, environmental activities and community-based environmental programs. Through a case study approach, which included survey, interview and documentary data techniques, it was concluded that the system of accounting for the environment was very limited. In relation to reporting, it was considered that environmental information needed to be consolidated through a formalized reporting mechanism rather than being disseminated via a range of different reports through fragmented methods, as was the then process.

4.2.5 Hypotheses Development

Sustainability reporting has been discussed in terms of research undertaken firstly from an international perspective and then from an Australian perspective. To provide a broader picture of sustainability reporting in the context of local government, LA21 research was also examined. Prior research, whilst indicating that such reporting is at a minimum, has shown that local governments in Australia do report on sustainability. Studies that provide limited evidence of such reporting include Farneti and Guthrie (2009), Herbohn and Griffiths (2008), Jigsaw Services (2004) and Potts (2004). Hypothesis 1 is posed.

H1: Sustainability reporting is undertaken by local government organizations in Australia.

The evidence suggests that there is no consistency in the choice of reporting media used to report on sustainability. Studies have shown that sustainability information is found in a mixture of reports including SoE reports, stand-alone sustainability reports, annual reports, strategy documents, council minutes, community reports and budget statements (Farneti and Guthrie 2009; Herbohn and Griffiths 2008; Jones *et al.* 2005). Further, it was found that reporting tended to be focused on just one component of sustainability reporting rather than an integrated viewpoint of sustainability (GRI 2004; ICLEI 2001; Lewis 2000; Whittaker 1996). Accordingly, Hypotheses 2 and 3 were developed.

H2: There is no consistency in the choice of media used to report sustainability information across the local government sector in Australia.

H3: The focus of reporting across the local government sector in Australia is an integrated approach to sustainability, focusing on environmental, social and economic factors.

However, in the light of the apparent emphasis on environmental sustainability reporting it may be that local authorities are selective in the sustainability reporting agenda. As a result, H3 is further divided to attach focus to each element of sustainability reporting.

H3A: The focus of reporting across the local government sector in Australia is environmental sustainability.

H3B: The focus of reporting across the local government sector in Australia is social sustainability.

H3C: The focus of reporting across the local government sector in Australia is economic sustainability.

4.3 Research Question 2: Are there Differences in the Level of Sustainability Reporting between Urban and Rural Local Authorities in Australia?

Australian local authorities are quite diverse in their geographical size and population. In an attempt to provide a classification schema of the broad array of local government bodies in Australia, the Australian Classification of Local Governments (ACLG) was created in 1994.

The ACLG classifies local authorities using three elements - the population, the population density and the proportion of the population that is classified as urban for the local authority. The schema classifies authorities into either urban or rural-based and then further separates each authority into specific sub-categories within the rural and urban categories. As at January 2008, there were 254 urban local authorities (also referred to as 'metropolitan' local authorities) and 312 rural authorities within Australia (Department of Infrastructure, Transport, Regional Development and Local Government 2009)**.** Local authorities are classified into urban and rural categories as follows:

Table 4.1
Australian Classification of Local Government Categories

	Population		**Population Density**		**Proportion of the population that is considered urban**
Urban	More than 20,000	OR	More than 30 persons per sq km	OR	90% or more of population is urban
Rural	Less than 20,000	AND	Less than 30 persons per sq km	AND	Less than 90% of population is urban

There is a limited amount of research that has been conducted in the local government sector on sustainability. This is further highlighted when looked at from a rural perspective. In considering, specifically, the environmental component of sustainability,

Keen and Mercer (1993 p. 94) noted that the focus of interest on the environment in local governments across Australia was largely metropolitan. This focus has continued with Pini *et al.* (2007) in providing a summary of Wild River's (2005) findings noting, '*there is still little known about the environmental capacity of poor, sparsely populated and geographically extensive local governments*' (p.164). Such viewpoints have extended into reporting and sustainability reporting with little progress having been made in this area of research.

The research conducted has tended to have formed part of a larger research project which examined both urban and rural local government, with rural government being more of a research by-product. Further, the studies have largely investigated the development and implementation of LA21 programs rather than the actual reporting of such processes. With no known studies having investigated rural sustainability reporting, these studies do provide some insights into the adoption of LA21 processes, which highlight the differences in urban and rural sustainability process up-take. These studies will now be considered.

Kupke (1996) investigated the commitment to LA21 by local government authorities in South Australia. A mail survey was sent to all councils in South Australia (119) with a 52% response rate achieved, separated into thirty-nine responses received from rural areas and twenty-three from metropolitan areas. In considering the initiatives that had been considered or introduced within local authority operations, there was a number of key differences found between metropolitan and rural authorities as highlighted in Table 4.2

Table 4.2
Initiatives in Environmental Management
Undertaken by Local Councils in South Australia

Initiatives Undertaken	Metropolitan % of Respondents	Rural % of Respondents
Corporate/Strategic Plan which includes strategies for integrated sustainability management	78	16
An integrated local area approach; social, economic, environmental	65	22
A LA21 program/plan	39	22
Training of elected members and staff relevant to integrated sustainability management	30	8

The metropolitan councils consistently achieved a higher percentage of respondents undertaking environmental initiatives compared to the rural respondents. These initiatives included development of integrated sustainability management strategies in the corporate/strategic plans and integrated sustainability approaches and development of LA21 programs (Table 4.2). The metropolitan councils appear to be well advanced in this area compared to their rural counterparts. This difference was also seen in research conducted by Qian and Burritt (2007) who examined environmental accounting developments in local government waste management practices. Their findings highlighted a significant difference between urban and rural authorities ($t=6.028$, $p<0.01$), in that urban councils tended to identify and use more environmental accounting information than rural councils.

Pini *et al.* (2007) examined environmental sustainability using fifteen case studies from rural Australia. The case studies were drawn from NSW, Victoria, Queensland and Western Australia by utilizing purposeful sampling. For each of the case studies chosen, interviews and documentary analysis were conducted with a total of sixty-nine interviews being undertaken.

Environmental sustainability was not found to be a priority for these councils. This was largely due to constraints such as financial constraints, human resource constraints in terms of knowledge and skill and more important day-to-day priorities taking precedence. The research considered, though, that there may be little difference in these forms of problems faced by rural and metropolitan municipalities either nationally or internationally. However, there is likely to be a difference in both the magnitude of the problems faced and the ability of the rural local government area to address them. As a report on the sustainability of Australian local governments has noted, compared with large metropolitan and urban fringe councils, rural and remote councils have much more pronounced financial problems and viability issues (Pricewaterhouse Coopers 2006).

In a further analysis, Pini (2009) analyzed the rural case studies conducted in NSW and Queensland (eight in total) by classifying them according to their level of environmental management engagement. Of the local authorities, three were found to be 'disengaged' from environmental concerns – that is, the councils had no formal environmental plan or strategy and, overall, environmental management appeared to be largely absent from corporate documentation. Four authorities were deemed to be moving from 'disengaged' to the 'engaged' stage but, in doing so, were faced with the impediments of lack of human and financial resources.

One of the eight case studies was found to be engaged in environmental management – however, the authority was seen as an anomaly amongst rural authorities as it '*has not experienced the type of deprivation that was endemic to other case study shires, and thus there was some latitude for funding environmental positions and programs*' (p.190). It was concluded that for other rural authorities to follow the lead of this 'engaged' authority, State and Federal governments will need to address the severe resource constraints felt in rural authorities and until such time local environmental progress in rural Australia will be curtailed.

Bajracharya and Khan (2004) examined four local governments, two in Sydney and two in Queensland to determine the extent of adoption of LA21 and sustainability initiatives by content analysis and semi-structured interviews. One of the factors found influencing

the extent of adoption of LA21 by these local authorities was their resource base. Authorities with a greater resource base were more likely to engage in sustainability initiatives whilst authorities with smaller resource bases were less likely to engage in sustainability initiatives. Whilst this study related specifically to metropolitan councils, this finding is very interesting when considered in light of rural councils and their smaller resource bases. Further, this study's findings concur with other LA21 studies that have concluded that the level of financial resources is one of the main factors determining the extent and approach of adoption of local conservation strategies and natural resource management (McKay and Rauscher 2007; Pini *et al.* 2007; Whittaker 1997; Keen *et al.* 1994; Keen and Mercer 1993).

Whilst prior studies have focused on the development and implementation of LA21 rather than the actual reporting of such processes, they do highlight that there are differences in the levels of adoption of LA21 between urban and rural councils (Pini *et al.* 2007; Bajracharya and Khan 2004; Kupke 1996). With no known studies that have investigated rural sustainability reporting and the differences between urban and rural sustainability reporting, given these differences in the implementation of LA21 processes, it is expected that there will be differences between the levels of urban and rural local government sustainability reporting in Australia. Therefore, Hypothesis 4 is stated.

H4: There will be a significant difference in the levels of sustainability reporting between urban and rural local government authorities in Australia.

4.4 Research Question 3: What are the Key Factors helping to bring about Sustainability Reporting in Local Government Authorities in Australia?

Research that has investigated the key factors driving the development of sustainability reporting in the local government sector include Farneti and Guthrie (2009) who found that sustainability reporting was chiefly motivated by key individuals being responsible for promoting that project (for example, the chief executive officer or the managing director). Similarly, Sciulli (2011) in a study of the influences on sustainability reporting,

found leadership by the chief executive officer and/or elected councillors as an important factor. Further, research conducted by the Ministry for the Environment (New Zealand 2002) established that the first step in the development of the TBL reporting process by many government organizations is senior management interest and commitment to the project. Without this key support and commitment, it was felt the implementation of sustainability reporting would be hindered from the outset.

This was also found to be the case in research conducted by Hughey and Coleman (2007) who developed a simple planning and sustainability reporting framework for a rural local authority in New Zealand. Whilst the reporting system was not subsequently implemented by the local authority, on reflection, the authors considered the lack of a champion in senior management was a major stumbling block, as leadership was considered fundamental to the success of the project.

Whilst focusing on social and environmental reporting (SER) in Italian local government organizations, Marcuccio and Steccolini (2005) found similar results. A review was conducted of twelve authorities that had either adopted or were preparing social and environmental reports by interview and documentary analysis techniques. They, in investigating the reasons underlying the adoption of SER, found that it was related to the person within the organization who first promoted and introduced SER practices.

The two key internal motivating factors found by Herbohn and Griffiths (2008) in preparing sustainability reports were leadership support and managerial sensitivity to climate change concerns, worsening droughts, rising temperatures and increasing population pressures. Jigsaw Services (2004) and Vandenberg (2002) concurred with this viewpoint, in concluding that the greatest internal driver was senior management. Similar results were found in focusing on LA21 research that has been conducted into the development of sustainability programs in local government authorities. Kupke (1996) and Evans *et al.* (2006) both found that the adoption of integrated LA21 programs appeared to be linked to leadership and inspiration from key managers. Fowke and Prasad (1996), in focusing on environmental concerns in NSW, established that council staff was considered most often as the group driving the environmental debate and action

at the local level. Whilst Tuxworth (1996), in an examination of LA21 processes in the UK, found in the bulk of authorities that LA21 initiatives were driven either by officers of the organization or jointly by officers and elected members of the organization.

Research has also found external factors have a role to play in the development of sustainability reporting – such research includes that of Dickinson *et al.* (2005) who reported that external stakeholder demand was a factor in explaining why public agencies produced sustainability reports. Further, Jigsaw Services (2004) and Vandenberg (2002) both found external factors in play and were being driven by stakeholders such as community groups with a sustainability focus. Whilst Farneti and Guthrie (2009) found the major external factor in producing sustainability reports was for the purpose of informing a variety of key stakeholders, with employees regarded as one of the main stakeholder groups. As stated by Organization E *'...a sustainability report is a really key aspect of showing leadership to our employees that this is what Organization E's doing ...*' (p.94). Sciulli (2011) in highlighting the importance of external community engagement finding that the level of such engagement can also influence the amount and type of sustainability reporting an organization engages in.

However, in a contrasting viewpoint Herbohn and Griffiths (2008) found that interviewees considered that there is little pressure from external stakeholders to undertake sustainability reporting. In the words of one manager in relation to external pressure from stakeholders, '*Do we feel any particular pull from the community to be reporting? Probably no*' (p. 17).

In focusing on LA21 research, similar results were found by Pini and Haslam McKenzie (2006) who found limited support for external community engagement in the development of environmental sustainability programs. However, in further analysis, Pini (2009) established that there were different categorizations of engagement in environmental management issues. By categorizing eight rural authorities, it was found for the one rural authority 'engaged' in environmental sustainability there were three factors facilitating this engagement. These factors involved the support of council staff

and councillors with such support essential from the mayor and CEO level, availability of resources and the engagement of the community.

Prior research has indicated that two primary factors appear to be driving the establishment of sustainability initiatives and reporting in the local government arena. The primary internal factor appears to be key leadership support (Farneti and Guthrie 2009; Sciulli 2011; Herbohn and Griffiths 2008; Hughey and Coleman 2007; Marcuccio and Steccolini 2005; Jigsaw Services 2004; Ministry for the Environment 2002; Vandenberg 2002). Whilst there are varying results, the primary external factor appears to be to inform stakeholders (Farneti and Guthrie 2009; Sciulli 2011; Dickinson *et al.* 2005; Jigsaw Services 2004; Vandenberg 2002). Consequently Hypotheses 5 and 6 were developed.

H5 Key leadership support is necessary to drive the establishment of sustainability reporting in local government authorities.

H6 Stakeholder engagement is critical to the successful establishment of sustainability reporting in local government authorities.

4.5 Research Question 4: Are Accountants being utilized in Sustainability Reporting in Local Government Authorities in Australia?

Sustainability reporting is considered by some to represent the most important advance in organizational reporting in the last few decades (Ball 2004a). To ensure adequate evaluation of an organization's sustainability reporting practices a system of accounting is required (Lamberton 1998). As organizations move increasingly to take up sustainability reporting, the role of finance professionals and accountants will become pivotal (Tarrant 2008, Ball 2004a). Who better to provide sustainability information than accountants who have significant knowledge, expertise and experience of accounting tradition and reporting (Lamberton 2005).

However, previous research does not indicate this to be the current situation in local government both from an international perspective and an Australian perspective. Such studies include Ball (2005, 2002) who conducted exploratory research into a UK local government organization examining sustainability accounting by the case-study approach. The organization's accountants were broadly supportive of sustainability reporting but believed that this type of reporting should not involve accountants and should be kept separate from financial accounting (2002). They saw that sustainability accounting had first to fit within the financial accounting framework for them to report on it. Comments included:

> *'I haven't paid a great deal of interest to it (environmental and sustainability accounting) – it's not particularly mainstream. There's been no interest – we've not taken it forward'* (p. 111).

> *'If we have a vision for sustainability, we ought to be reporting annually (Senior manager, Finance Department)'* (p. 111).

In a further case-study examining two contrasting UK local government authorities, Ball and Seal (2005) concluded that accountants involvement in the social accounting agenda is being constrained in terms of the way they think of their functional roles and existing routines. In terms of utilizing accountants to mobilize the social accounting agenda, it was considered '*we find it difficult to conceive of accountants going much further with social accounting*' (p. 469).

Dickinson *et al.* (2005), in their mail survey study, established that sustainability reports were most frequently prepared by environmental departments (27%), followed by teams of reporters (22%), strategic planners and corporate planners (both representing 12%). It was considered by some organizations that sustainability reporting frequently commences in the environmental departments until it gathers sufficient momentum to be integrated throughout the organization (p. 31). With public sector sustainability reporting being in its infancy, this may be a recurring theme in local government organizations.

Telford (2005), in analyzing the results of a UK national survey that examined environmental management through LA21 processes, found that accountants are often not involved in their organizations' environmental issues and reporting of issues. Only 32% of responding authorities reported finance department's involvement in providing information for environmental decision-making purposes whilst only 10% were involved in producing environment-related reporting information. Telford considered that accountants were not yet as involved with environmental issues as they should be but it is important that they become more involved in future if further progress is to be made. Similar results were found in a previous UK study by Bowerman and Hutchinson (1998) who examined the role of accountants in local government in the context of capital expenditure decisions for environmental projects. Through documentary evidence and semi-structured interviews, it was found that accountants are rarely involved in environmental decision-making. They suggested that a more strategic role for local government accountants would be difficult to establish without first changes occurring in the ethos and perceptions of local government accountants.

From an Australian perspective, Farneti and Guthrie (2009) found that not one of the seven public sector organizations they interviewed indicated that finance or accounting was involved in matters associated with sustainability reporting. No explanation was provided by the interviewees as to why this was the case. Rather, the environmental units within the organizations most frequently prepared the sustainability reports. Sciulli (2011) in conducting semi-structured interviews with five local authorities, found that sustainability reporting fits within the domain of sustainability managers and not within the accounting or finance department at the present time.

Herbohn and Griffiths (2008) in their analysis of sustainability reporting of three Queensland public sector organizations concluded that there was a general lack of support provided by the accounting professional bodies in helping local government authorities in adopting sustainability reporting practices. They further found that none of the sustainability teams from the case study organizations had an accounting background. Perhaps, though, as highlighted by Douglass (1996) this lack of involvement by

accountants may have to do with the traditional preoccupation of local government accountants with financial matters (p. 46).

In the study by Whittaker (1996), not one of the survey respondents was utilizing the finance or accounting departments in their sustainability initiatives. Rather, the environmental and planning departments were being utilized most frequently. This finding concurred with the study by Tuxworth (1996) who considered that as LA21 activities were seen to be more of an extension of existing environmental work, allocation of responsibility for LA21 processes tended to be given to officers with environmental credentials within each organization.

Tarrant (2008) considers that the role of finance professionals and accountants will become pivotal as organizations move increasingly to take up sustainability reporting. However, prior research has indicated that accountants have a minimal level of involvement in the preparation of sustainability reports with environmental departments being the most common preparers of such reports. This perhaps implies that this is an evolving process with accountants becoming involved in the process once it gathers sufficient momentum within the organization as considered previously by Dickinson *et al.* (2005). Or, perhaps, as considered by Ball (2002), accountants do not yet appreciate the extent that their skills and expertise will bring to sustainability reporting. Or, perhaps, as Burritt *et al.* (2009) argue, the lack of training, education, knowledge and experience of accounting personnel is acting as an obstacle to the increased involvement of accountants in the area of sustainability accounting in the public sector.

It is expected that this trend, being lack of involvement by accountants, will continue on analysis of local government sustainability reporting in Australia. Hypothesis 7 is posed.

H7 Accountants are not being utilized in the sustainability reporting process by local government authorities in Australia.

4.6 Research Question 5: What Sustainability Frameworks are currently being adopted by Local Government Authorities in Australia?

Research that has investigated the types of sustainability reporting framework being adopted by local government authorities is separated into two components for discussion –firstly, international research and secondly, research specific to Australia.

4.6.1 Sustainability Reporting Frameworks in Local Government – International

International research on sustainability reporting frameworks includes Dickinson *et al.* (2005) who found high awareness of the GRI framework, with 70% of mail survey respondents (42) having heard of the guidelines and 50% of respondents (30) having made reference to it with 8% of respondents (five) having made reference to the PASS. Whilst this was quite a low up-take for the PASS, this could easily be explained given that the PASS was released in March 2005 and the questionnaire was conducted from May – June 2005. It was determined that the greatest activity using the frameworks was either through full disclosure (12%) or use as a reference guide (13%). Respondents also reported that they were aware of a range of other reporting systems and frameworks. After GRI, the highest awareness was of the ISO 14000 series (approximately 50% of respondents had heard of these guidelines and 25% had made reference to the guidelines in their report) and the work of UNEP/SustainAbility[7] (approximately 50% of respondents had heard of these guidelines but no respondents had made reference to them).

With the GRI guidelines being the most utilized guidelines, mail survey respondents were asked why they had used these guidelines. Respondents reasoned that the GRI framework was perceived to represent best practice reporting, it was seen to provide good information and, as such, the reports would be well regarded. Although few respondents had made reference to the PASS, respondents were quite optimistic about the introduction of this guideline with cited benefits including consistency, greater comparability and stream-lined reporting. However, a number of negatives were also identified including

[7] SustainAbility is a consultancy firm founded in 1987 by John Elkington.

the level of prescription within the guidelines and 'one size does not fit all' – the possible inability of the guidelines to meet the diversity of the public sector.

In an attempt to determine if there are patterns of usage within the public sector and usage of the GRI framework, Pearson correlation testing was conducted. Results indicated that there was a negative correlation between local agencies and knowledge of the GRI guidelines (correlation = -0.258, $p<0.05$) and local agencies having referenced to the GRI guidelines (correlation = -0.331, $p<0.005$). It was suggested that local agencies are less likely than State/regional or national agencies either to have heard of the GRI guidelines or referred to the guidelines. However, with the restricted size of the survey results (60) with only thirty-five responses being from local government and with the GRI considered to be the current leading sustainability reporting framework, it is recommended that further research be conducted to examine and verify these results.

Analysis was also conducted into the type of elements included in sustainability reports. There were a wide range of reporting elements identified with no single element included in all respondents' sustainability reports (the highest was 65%). It was considered, based on these results, that the public sector is a long way from consistency and comparability in sustainability reports.

In an Italian study, Marcuccio and Steccolini (2009) examined the voluntary disclosure practices of local governments. They analyzed the social reports of fifteen local authorities in the 2002 calendar year via content analysis (utilizing their own developed classification scheme based on internal and external perspectives of public sector activities). It was determined that a uniform framework of sustainability reporting was not yet in place in Italy and local governments were tending more to experiment with such documents, giving rise to a variety of reporting approaches (p. 163). They found for disclosures that focused on external impacts, social issues accounted for approximately 61% of external disclosures, with economic issues accounting for 23% and environmental issues being reported the least (16%). However, it was noted that different approaches to balancing the percentage of social, economic and environmental information emerged.

Whilst noting this limitation, the higher disclosure of social information would be expected in reports entitled 'social reports'.

Similar results were found by the GRI (2004) conducted a qualitative overview of sustainability reporting practices in the public sector. It was concluded that public agencies were not applying a common framework for their sustainability reports which has resulted in inconsistent approaches to reporting. In 2010, the GRI conducted a further review (Tort 2010) that focused on ten public agencies who were currently reporting utilizing either the GRI Guidelines and/or the PASS. Specifically, their reports were analyzed to determine the level of reporting on the disclosure elements contained within the PASS. Of the ten public agencies, five were local government authorities (Auckland City Council, City of Melbourne, Gold Coast City Council, Penrith City Council, Waitakere City Council). From the review, it was concluded that sustainability reporting in public agencies is still in its infancy with reporting on the PASS fragmented and disclosures found to be more qualitative and diverse in nature. Dumay *et al.* (2010), in a review of reporting practices by organizations using services provided by corporateregister.com, whilst also highlighting the lack of take-up of sustainability reporting, concluded that the GRI appears to be dominating the current reporting practices of public and third sector organizations.

In a further Italian study, conducted by Farneti *et al.* (2010), content analysis was utilized to examine the voluntary social reporting practices of seventeen local government organizations. These organizations were identified as being the 'better social reporting practice' organizations within Italian local government. In reviewing the reporting frameworks that were adopted for each of the authorities, it was noted that only three referred to any specific reporting guidelines. The type and extent of disclosure in stand-alone social reports were examined by utilizing a coding instrument which incorporated the GRI and PASS reporting elements split into six categories (as developed by Guthrie and Farneti, 2008). The coding instrument found that local authorities had reported on a total of only 13% of all GRI reporting elements with the highest reporting category being 'public agencies' recording a 52.4% disclosure rate. In terms of social and environmental disclosure, the study concluded that social reporting in Italy is an emerging field

(confirmed also in Mussari and Monfardini 2010) and the disclosure practices analyzed do not conform to the expected content of a GRI social report.

However, it must be noted that not one of the seventeen local authorities studied had specifically referred to the GRI framework in their social reports and, thus, were not necessarily utilizing the reporting elements of the GRI. Further, there was little analysis of what was actually being reported in the social reports, rather it was framed from the point of view of what was not included in the reports based on the GRI Framework. Perhaps local authorities were utilizing different reporting frameworks other than the GRI –these results could have been further strengthened by the use of a multi-method approach such as interviews.

4.6.2 Sustainability Reporting Frameworks in Local Government – Australia

Herbohn and Griffiths (2008) in examining three local government authorities that had demonstrated a commitment to sustainability reporting in Queensland established that all three authorities utilized different reporting frameworks. The first council utilized the GRI guidelines plus the PASS supplement for the 2007 reporting period. This was their first year at sustainability reporting and they considered that the guidelines plus the supplement were critical in their ability to undertake sustainability reporting. As one manager explained:

> *'It gives us on the one hand an international benchmarking kind of capability, a globally used instrument to report against so that (name of city) can compare itself against other cities, but also there is evidence of commitment to sustainability in a language that other people can understand'* (p. 15).

The second council had not found any of the existing frameworks particularly useful. Instead, they had developed their own reporting indicators drawn from the Councils Corporate Plan and Planning Scheme. The third council was currently reviewing three reporting models in an effort to make a decision on which was most appropriate for their organization: reports from other local governments throughout Australia; private sector reporting models; and third, they had engaged with the ICLEI and were examining

whether the ICLEI reporting model (Melbourne Reporting Kit) was suitable for their organization.

Marr (2006), in a review of selected local authorities, concluded that there is no standard framework currently being utilized for local government TBL reporting in Australia. Marr reviewed by case-study three authorities that had all undertaken TBL reporting. Each had utilized different frameworks including the ecological footprint, an in-house developed framework and the use of monthly report indicator cards showing specific financial, environmental and social indicators. Potts (2004) in a separate review of three local government organizations concurred with this viewpoint in stating that there is no single agreed framework for TBL reporting in local government today .

Farneti and Guthrie (2009) in interviewing officers from seven public sector organizations that had utilized the GRI framework found that none of the organizations had started from a 'clean slate' and adopted the GRI framework (or the PASS supplement) to report on sustainability. Rather, they had started with a TBL approach or the balanced scorecard approach and had only recently moved to the GRI framework because of its international reputation and standing.

Whilst the GRI was considered by interviewees to represent 'best practice' reporting, the interviewees indicated a number of drawbacks and difficulties associated with using the GRI framework (and the PASS supplement). In most cases, the organizations used only part of the GRI framework and found the supplement difficult to apply, too general and not very useful. Whilst all interviewees were utilizing the GRI framework, it was ascertained that the term sustainability had multiple meanings with interviewees focusing on different sustainability issues including environmental, social, ethical and political issues (also discussed in Guthrie and Farneti 2008). Similar results were found by Vandenberg (2002) who, in conducting a scoping study on TBL reporting in Victoria (incorporating business, local and State government and non-government organizations), found a lack of consistency and confusion in defining the term TBL. It was considered that the lack of a clear definition is one of the greatest barriers to adoption and/or progress of TBL reporting.

In a further study, Guthrie and Farneti (2008) analyzed the voluntary sustainability reporting practices of seven public sector organizations against the GRI and PASS guidelines, specifically examining the number of environmental and social disclosures. For the 2005/2006 financial year, disclosures were examined framed around six categories of sustainable development that were identified in the guidelines– environmental, human rights, labour practices, product responsibility, society and specific public sector disclosures which were further specified into indicators (eighty-one).

Their findings indicated that the indicators being reported on were diverse in nature and that both the number of disclosures and patterns varied widely. For example, of the eighty-one indicators identified within the GRI and PASS guidelines, only 32% (twenty-six indicators) of these were used for reporting by the organizations. It was considered that the application of the GRI was fragmentary and that the organizations were cherry-picking and were choosing to disclose only some of the GRI indicators.

In further analysis of the indicators, they were separated into core reporting (fifty-four) and additional reporting (twenty-seven) indicators. Of the core indicators, only 35% of the elements were reported on by the group. On analysis of the specific indicators developed for public-sector organizations in the PASS, of the eleven indicators, it was found that ten were reported on by at least one of the organizations that were analyzed. It was suggested that both the GRI and public-sector supplement were too generic for all public-sector organizations, with just a few indicators being focused on by each of the reporters.

Sciulli (2009) conducted a review of environmental sustainability reporting practices in six coastal Australian local authorities, being Bass Coast Shire Council, Mornington Peninsula Shire, Surf Coast Shire, Shoalhaven City Council, Wollongong City Council and Maroochy Shire Council. Each authority's annual report was benchmarked against ten major environmental categories identified in the GRI's PASS guidelines. The results highlighted a low overall level of sustainability reporting disclosures against the guidelines – ranging from 0% for total environmental expenditures to a high of 33% for significant environmental impacts of transportation.

As indicated, though, the findings from the study need to be treated with caution as a low disclosure rate does not necessarily denote that the councils are not reporting sustainability activities but, rather, may simply suggest that there had not been any significant environmental impacts that needed to be reported. This was highlighted as being the case for two of the ten environmental categories. Further, no details were provided on the six local authorities as to whether or not they were currently utilizing the GRI framework to report against. If the authorities were not currently utilizing the GRI framework, this may help to explain the low sustainability reporting disclosures found.

Research that has been conducted in Australia focusing on environmental reporting in local government includes that of Mladenovic and van der Laan (2007). This research, focusing on mandatory SoE reporting by NSW local governments, analyzed 136 SoE reports for the 2003 year. The NSW Department of Local Government SoE Reporting Guidelines were utilized as a framework for content analysis purposes. Results revealed significant variability in SoE practices, not only in the volume of information reported but also in the nature of the issues addressed, the indicators employed and compliance with the guidelines. It was suggested that further work is required to determine appropriate reporting tools and metrics in an effort to bring about consistency, comparability and accountability. Previous earlier studies that have also examined SoE reporting in Australia include Lloyd (1996) and Anderson (1997). Similar shortcomings were found in these studies with findings including a lack of consistency and integration, an absence of reporting in specific environmental areas and the specific need for an agreed model or framework to provide for the establishment of clear quantifiable environmental criteria. Further, research conducted by Mercer and Jotkowitz (2000) concluded that there was a total lack of consistency in the way environmental elements were defined and reported on across ten local government authorities. For example, a total of forty-nine discrete environmental elements was reported on across the ten councils but on closer examination, different descriptors were often used to refer to the same thing. Further, it was not uncommon that elements were mentioned by only one council. In a study focusing on environmental accounting and reporting in a Victorian local government authority, Douglass (1996) found a lack of consistency in definitions and other common environmental terms and phrases being utilized by survey and

interview respondents across the organization. It was concluded that a taxonomy of environmental terms and definitions was needed to be developed and adopted by local government and applied consistently.

4.6.3 Hypothesis Development

An analysis of prior research into sustainability reporting in Australia was found to be generally limited to a small number of case studies in local authorities, with findings indicating no dominant consistent framework prevailing (Herbohn and Griffiths 2008; Marr 2006; Potts 2004). With Australian research limited, research from an international perspective provides a broader viewpoint. In a mail survey undertaken by Dickinson *et al.* (2005), the dominant framework was found to be the GRI framework (confirmed in Dumay *et al.* 2010) with 50% of respondents having referred to it. In further testing, whilst it was highlighted that local agencies are less likely both to have heard of the GRI guidelines or to have referred to the guidelines, it was noted that due to the restricted sample size and with the GRI considered to be the leading reporting framework today, further testing was recommended to examine and verify this result. Accordingly, when local government authorities in Australia are examined, it is expected that the dominant framework being utilized will be the GRI framework for local authorities. Therefore, Hypothesis 8 is posed.

H8 Local government authorities in Australia utilize the GRI framework in their sustainability reporting practices.

Of organizations that have utilized the GRI framework in Australia, Guthrie and Farneti (2008) found that the application of the framework was being utilized in a fragmentary manner. The indicators being reported were diverse in nature and both the number of disclosures and patterns varied widely. Similar findings were reported in Tort (2010), Sciulli (2009), Herbohn and Griffiths (2008), Lamprinidi and Kubo (2008) and from an environmental perspective, Mladenovic and van der Laan (2007) and Mercer and Jotkowitz (2000). Based on these findings, it is expected that there will be no consistent core of reporting indicators being utilized in sustainability reporting in local authorities. It is further expected that a possible reason for this is that the GRI framework is not specific

to the needs of the local government sector in Australia. This concurs with the findings of Guthrie and Farneti (2008), who concluded that the GRI and the public sector supplements were too generic for all public sector organizations. Accordingly, Hypotheses 9 and 10 were developed.

H9 There is no consistent core of reporting indicators being utilized in sustainability reporting by the local government sector in Australia.

H10 The GRI reporting framework is not specific to the needs of the local government sector in Australia.

It was further established that the term, sustainable development, has multiple meanings. This was found in the research of Farneti and Guthrie (2009) and Guthrie and Farneti (2008). Other research that has been conducted in similar fields of enquiry (Vandenberg 2002 and Douglass 1996) also found a lack of consistency in the definitions and terms being utilized in local government. It is expected that this trend will continue with no consistent definition of sustainable development being utilized in sustainability reporting in local government authorities in Australia. Therefore, Hypothesis 11 is stated.

H11 There is no consistent definition of sustainable development being used by local government authorities in Australia.

4.7 Summary

This chapter has developed five specific research questions for this study. These questions were developed from a review of the literature from which eleven hypotheses were subsequently posed.

In the next chapter, the research methodology is discussed covering the specific data collection and analysis techniques used for this study.

Chapter 5 Research Methodology

5.1 Introduction

In this chapter the research methods utilized are discussed with the approach taken to the selection of the sample. Details are then provided as to the techniques utilized in analyzing the collected data.

5.2 Research Method

This study adopted a multi-method approach incorporating both mail surveys and interviews. This method of research is advocated by a number of researchers as allowing for a more complete, holistic picture to be shown as it can uncover unique variances which otherwise may have been neglected by the use of a single research method (Creswell 2003; Jick 1979 p. 603; Smith 1975; Denzin 1970; Webb *et al.*, 1966).

5.2.1 Research Methods to be Utilized

In the area of social and environmental and/or sustainability accounting and reporting, the traditional methods of research have been to use content analysis (Owen 2008; Guthrie and Abeysekara 2006; Milne and Adler 1999) or literature/theoretical historical commentaries (Parker 2005 and 2011) through a single research lens approach with limited usage of qualitative research methodologies (De Silva 2011). Whilst research employing a single lens approach can provide an initial understanding, a more thorough method is to use mixed method methodology. Doing so provides researchers with a '*better, more substantive picture of reality; a richer, more complete array of symbols, and theoretical concepts; and a means of verifying many of these elements*' (Berg 2007 p. 5). For this study a mixed method approach was adopted. Initially, a mail survey was sent to the chief financial officers (CFOs) in all local government authorities in Australia. Surveys were then followed by a number of key interviews with senior management. The use of these two methods allowed an analysis across a broad cross-section of organizations adapting quantitative techniques and an in-depth analysis of a number of organizations adapting qualitative techniques.

5.2.2 Usage of Research Methods in Sustainability Reporting Research

The use of mail surveys has a number of practical advantages including the ability to access potential respondents from a large sample of individuals (Hair *et al.* 2003) covering a wide geographical area (Sekaran 2003). To date, mail surveys have been utilized in a limited number of local government studies that have focused on sustainability/environmental reporting. Such studies include the International Council for Local Environmental Initiatives (ICLEI) which conducted a global mail survey in 2001 aimed at local authorities to determine the extent of LA21 activity with respondents representing 113 countries world-wide. Whilst in 2005 the Centre for Public Agency Sustainability Reporting (Dickinson *et al*. 2005) undertook a mail survey to examine the up-take, forms and practice of sustainability reporting by public agencies internationally.

In the United Kingdom (UK), Telford (2005) surveyed all local authorities (468) to investigate what local governments were doing to address environmental management issues whilst Tuxworth (1996) examined two mail surveys conducted by the Local Government Management Board (LGMB) in the UK focusing on the up-take of LA21 in local government. From an Australian perspective, Whittaker (1996 and 1997) examined the results from the National Local Sustainability Survey conducted in 1996, being a mail survey sent to all local authorities in Australia. The survey was developed to examine the progress of authorities in adhering to the LA21 time-table. Fowke and Prasad (1996) surveyed all local government organizations falling within the greater metropolitan region of Sydney, Newcastle and Wollongong whilst Kupke (1996) surveyed local government organizations in South Australia in relation to environmental management and sustainable development.

One of the major problems, though, that can arise using mail surveys is low response rates (Alreck and Settle 1995). In an effort to counteract this problem, the covering letter was written with the intention of convincing the respondents of the study's significance by explaining the study's anticipated contribution to the on-going debate on sustainable development. Two follow-up letters incorporating the identical survey were also utilized in an effort to increase the response rate.

The mail survey results assisted in developing and informing the second stage of the study, that is, the interview stage. The interview stage was intended to complement and provide a more in-depth analysis on sustainability reporting in local authorities. As stated by Cavana *et al.* (2001), interviews are '*a dynamic vehicle for exploring the rich and complex body of information possessed by an individual*' (p.150). Interviews have a number of practical benefits including the ability to undertake further probing of interviewees to seek clarification and any ambiguity and misunderstanding can be corrected (Drever 1997). Further, non-verbal cues and body language can be detected which can assist in conducting the interview or in interpreting the results later (Serakan 2003).

Interviews have been utilized by a small number of researchers in sustainability reporting in the local government context. Farneti and Guthrie (2009) utilizing semi-structured interview techniques interviewed eleven people across seven Australian public sector organizations. The primary focus of their research was to investigate the motivations for public sector organizations to produce sustainability reports. Herbohn and Griffiths (2008) also conducted ten semi-structured interviews in examining three Queensland local government organizations investigating the progress of local government towards the adoption of sustainability reporting frameworks. The process undertaken in planning and conducting the mail survey is now examined.

5.3 Mail Survey

5.3.1 Mail survey Subjects

The sampling frame for this study was the CFO's of all local government authorities in Australia which currently total 566 (Department of Infrastructure, Transport, Regional Development and Local Government 2009). As this study was not dealing with known sustainability reporters in local authorities (but all local authorities in Australia), by focussing on the senior position of CFO it was thought that a whole-of-organization approach to sustainability reporting would be achieved rather than focusing on a particular role within the local authority such as sustainability report preparer(s). This approach is similar to that of Pilcher and Dean (2009) who, in focusing on financial

reporting compliance in local government, distributed a mail survey to the Director of Corporate Services (or similar) in 2006. In doing so, they highlighted that the position of Director of Corporate Services had the advantage of having an overview of what was happening in the organization – including both the internal decision-making processes and the external reporting requirements (p. 729-730).

An up-to-date mailing listing was purchased from the Australian Local Government Association (ALGA). This list incorporates all local authorities that are currently registered with ALGA – this listing totals 555 authorities. This list was checked to ensure its accuracy and completeness. Eleven authorities were identified that were not listed. Their contact details were accessed from the World Wide Web and incorporated into the ALGA listing.

5.3.2 Mail survey Questions

The mail survey for this study was designed to gather data to test the five research questions that have been developed. There were 38 questions[1], split into six sections. Questions include multiple-choice response questions, yes/no response questions, interval scaled response questions ranging from 1-5, one-word response questions and open - ended questions.

Section 1, covering questions 1-4, was designed to seek characteristics of the participants and the organization that they represent. Information included job title of the participant, State or Territory in which the local government organization was situated, total revenue, population and classification of the organization according to the Australian Classification of Local Government (ACLG).

Section 2, incorporating questions 5-13, examined the level and type of voluntary sustainability reporting to external stakeholders by the organization. The questions sought to determine if there was a particular focus of sustainability reporting within the organization, when did such reporting commence and why the organization reports this

[1] Refer Appendix I for mail survey document.

information. Further questions sought to determine the type and importance of the reporting media being utilized to report this voluntary information.

Section 3, covering questions 14-18, was designed to determine the key factors in the establishment of sustainability reporting. The questions focused on the importance of key leadership and stakeholder engagement. Opportunity was also provided for respondents to describe any other factors that they considered important in the establishment of sustainability reporting.

Section 4, dealing with questions 19-23, was aimed at determining which department in the organization was responsible for preparing the sustainability report whilst Section 5, covering questions 24-35, investigated guidelines that were adopted in the preparation of the sustainability report. The questions sought to determine whether the GRI or the PASS guidelines were being used, and if so, why, and the importance of these guidelines. Where these guidelines were not used, participants were asked to consider why they do not and whether they used any other guidelines in the preparation of their sustainability reports. Participants were also asked to consider a number of reporting elements and the importance of each element in voluntary reporting. Further, the questions sought to determine the definition of sustainable development that is being utilized by participants.

Section 6, incorporating questions 36-38, was aimed at determining future sustainability reporting practices in the participant's organization. Where participants believed that they will report on sustainability information in the future, they were asked to state if this information would be reduced, similar or expanded in comparison to previous years sustainability reporting.

5.3.3 Pilot Testing

The mail survey was pilot-tested in two stages prior to the formal mail-out stage. The purpose of pilot testing was to assess whether the survey questions could be correctly understood by respondents and easily answered by them (Morgan 1990). In particular, as considered by Kinnear and Taylor (1991), it is important to ensure that the words used in

survey questions have the meaning to the respondent that the researcher intended them to have.

The first stage involved the pre-testing of the mail survey by three colleagues within the School of Accounting and Corporate Governance. The purpose of this stage was to ensure that any obvious problems such as formatting or readability of the questions were identified and required revisions or amendments were made before the formal pilot-test.

The second stage, being the formal pilot-test, involved a sample of local government authorities. Hair *et al.* (2003) considered that a number of no more than thirty participants would be an acceptable sample size as sample sizes larger than thirty do not typically provide any substantial incremental information to use in testing the survey document. Thus, a sample size of thirty participants was chosen for this research project. To ensure that the pilot study was a representative sample of views of Australian local government, the authorities were chosen by pro-rating the number required across each State/Territory and then by random sample within each state, as shown in Table 5.1.

Table 5.1
Pilot Study – Number of Local Authorities

State	**Number of Local Authorities**	**Pilot Study Number By State**
NSW	155	8
Northern Territory	17	1
Queensland	73	4
South Australia	74	4
Tasmania	29	2
Victoria	79	4
Western Australia	139	7
Total	566	30

A letter of introduction and survey was sent to the CFO's of each pilot study participant organization. They were asked to complete the survey and return it in the envelope provided. They were also asked to complete and return an evaluation sheet which included a number of questions. These questions covered such issues as the clarity of the instructions, the understandability of the questions, the absence/presence of bias in the questions and the length of time taken to complete the survey. Each question allowed participants to record individual question numbers and make comments about the question in relation to each of the above four issues, where required. The resultant pilot-test results were then examined and any necessary changes made to the survey document.

5.3.4 Mail-out of the Survey

Included in the mail-out of the survey document was a covering letter[2] explaining the purpose of the research project, two reply-paid envelopes and a guarantee of confidentiality to encourage participants to complete and return the survey. Further to encourage participation, participants were offered a summary of the results when completed. To obtain the summary, participants were asked to complete a separate sheet attached to the survey and place it in the smaller of the two reply-paid envelopes. This ensured that respondents' answers remained anonymous.

Studies have shown that there are a number of techniques available to researchers to improve survey response rates (Edwards *et al*. 2002; Brennan 1992; Chiu and Brennan 1990). Three techniques were utilized in this study. The first involved two follow-up re-mailings of the survey document. It is generally considered that re-mailings can effectively improve response rates (Moore and Tarnai 2002; Dillman 2000). The re-mailings were timed with a space of approximately three weeks between each as it is considered that three to four weeks is a reasonable time between mailings (Alreck and Settle 1995).

The second technique involved the covering letter. The letter was written to convince the respondents of the study's significance to the on-going debate of sustainability reporting in the local government sector.

[2] Refer Appendix II for mail survey covering letter.

The third technique involved the colour of the paper chosen for the mail survey. Whilst there are mixed results on the effects of coloured paper, there are a number of studies that have found coloured paper has positive effects on survey response rates (Fox *et al.* 1988; Jobber 1986; Crittenden *et al.* 1985) with both Hartley and Rutherford (2003) and Waltemyer *et al.* (2005) finding yellow paper gave a higher percentage of returns in comparison to white paper. The colour of the paper was yellow for the initial and second mail-outs. For the third and final mail-out, a bright pink colour was chosen to make sure that the survey document stood out to the recipient.

In the following section, the types of hypothesis utilized in this study are discussed which are then examined in terms of the questions that were used within the mail survey.

5.4 Hypotheses Testing

5.4.1 Types of Hypothesis

Hypotheses can be stated either in the null or alternative form. Null hypotheses are statements that are expressed as a definitive, exact relationship between two variables with no significant relationship between the variables. Whilst alternative hypotheses are the opposite of the null, they are statements expressing a relationship between two variables or indicating differences between groups (Cavana *et al.* 2001). For the purposes of this research, both null and alternate hypotheses were developed as guided by prior literature.

5.4.2 Linking the Hypotheses to the Mail Survey Questions

The first research question in this study sought to determine the extent to which sustainability is being reported in the local government sector in Australia. Hypotheses 1, 2 and 3 have been developed to respond to this research question. As a result of previous research (Farneti and Guthrie 2009; Herbohn and Griffiths 2008; Jigsaw Services 2004; Potts 2004), it is expected that whilst sustainability reporting in the local government sector may be minimal, local governments in Australia do, in fact, report on sustainability. Consequently, Hypothesis 1 is stated as follows.

H_1: Sustainability reporting is undertaken by local government organizations in Australia.

To test this hypothesis, the responses to questions 5, 6 and 7, and questions 36 and 37 in the mail survey were analyzed[3]. These questions were as follows.

- Do you report any voluntary sustainability information to your external stakeholders? (Q5)
- In what year did you commence reporting this voluntary information? (Q6)
- Why did you report this information? (factors provided) (Q7)
- What is the likelihood that in the future you will report voluntary sustainability information to your stakeholders? (Q36)
- If you plan on reporting voluntary sustainability information in the future, compared to previous years, will the information be reduced, similar or expanded? (Q37)

It is anticipated that whilst sustainability reporting is being conducted in the local government sector in Australia, there will be no consistency in the choice of reporting media used to report this information. This expectation is consistent with prior research (Farneti and Guthrie 2009; Herbohn and Griffiths 2008; Jones *et al.* 2005). Hypothesis 2 is stated as follows.

H_2: There is no consistency in the choice of media used to report sustainability information across the local government sector in Australia.

To test this hypothesis, the responses to questions 8 and 9 were analyzed. These questions were as follows.

- How important are each of the following reporting medium to your organization in reporting information to your stakeholders? (Q8)

[3] Refer Appendix I for mail survey document.

- In what reporting medium(s) is your organization's voluntary sustainability information being reported? (Q9).

It is believed that local government organizations may focus on a particular component of sustainability reporting rather than focus on an integrated approach. This expectation was derived from prior research (GRI 2004; ICLEI 2001; Lewis 2000; Whittaker 1996), which found that there was an emphasis towards environmental sustainability reporting. Thus, Hypothesis 3 is stated as follows.

H_3: The focus of sustainability reporting across the local government sector in Australia is an integrated approach to sustainability, focusing on environmental, social and economic factors.

H3 was sub-divided to capture each of the elements of sustainable development as follows.

H3A: The focus of reporting across the local government sector in Australia is environmental sustainability.

H3B: The focus of reporting across the local government sector in Australia is social sustainability.

H3C: The focus of reporting across the local government sector in Australia is economic sustainability.

To test these hypotheses, the responses to questions 10 and 11 in the mail survey were analyzed. These questions were as follows.

- How important is each of these voluntary sustainability reporting approaches to your organization? (Q10)

- For the most important approach, please explain why you consider it is more important for your organization in comparison to the other approaches (Q11).

The second research question investigated whether there were any differences in the level of sustainability reporting between urban and rural local governments in Australia. No known research has investigated integrated sustainability reporting from a rural viewpoint and the differences between urban and rural sustainability reporting. LA21 studies were reviewed and it was found that there was a limited number of local government studies that focused on one component of sustainability, environmental. These studies (Pini *et al.* 2007; Bajracharya and Khan 2004; Kupke 1996) provide insights into the differences in urban and rural up-take of LA21 processes. Based on these differences, it is expected that there will be differences in the levels of sustainability reporting between urban and local governments. Accordingly, Hypothesis 4 is stated as follows.

H4: There will be a significant difference in the levels of sustainability reporting between urban and rural local government authorities in Australia.

To test this hypothesis, the responses to questions 4, 5, 12 and 13 were analyzed. These questions were as follows.

- According to the Australian Classification of Local Government (ACLG),
    - What classification is your organization?
    - What is the residential population of your local government area? (Q4)
- Do you report any voluntary sustainability information to your external stakeholders? (Q5)
- In view of your organizations priorities and commitments, how important is reporting on sustainability to your organization? (Q12)
- How significant is each of the following factors in restricting or preventing sustainability reporting in your organization? (Q13)

The third research question seeks to determine the key factors that help to bring about sustainability reporting in local government in Australia. Based on prior research, (Farneti and Guthrie 2009; Sciulli 2011; Herbohn and Griffiths 2008; Hughey and

Coleman 2007; Dickinson *et al.* 2005; Marcuccio and Steccolini 2005; Jigsaw Services 2004; Vandenberg 2002; Ministry for the Environment 2002) it is expected that there will be two primary factors driving the establishment of sustainability reporting in Australia. Consequently, Hypotheses 5 and 6 are stated as follows.

H_5: Key leadership support is necessary to drive the establishment of sustainability reporting in local government authorities.

To test this hypothesis, the responses to questions 14 and 15 were analyzed. These questions were as follows.

- How important is key leadership support in the establishment of voluntary sustainability reporting practices? (Q14)
- At what level does key leadership support need to originate? (Q15)

H_6: Stakeholder engagement is critical to the successful establishment of sustainability reporting in local government authorities.

The questions that relate to Hypothesis 6 were questions 16 and 17. These questions were as follows.

- How important is stakeholder engagement in the establishment of voluntary sustainability reporting? (Q16)
- Which stakeholders are important to engage with in the establishment of voluntary sustainability reporting practices? (Q17)

The fourth research question explored the issue of whether there is a lack of accounting expertise being utilized in sustainability reporting in local government in Australia. Based on prior research (Farneti and Guthrie 2009; Sciulli 2011; Herbohn and Griffiths 2008; Ball 2005, 2002; Ball and Seal 2005; Dickinson *et al*. 2005; Telford 2005; Bowerman and Hutchinson 1998; Whittaker 1996), it is expected that accountants will have a minimal involvement in the preparation of sustainability reports. Accordingly, Hypothesis 7 is stated as follows.

H_7: Accountants are not being utilized in the sustainability reporting process by local government authorities in Australia

To test this hypothesis, the responses to questions 19 to 23 were analyzed. These questions were as follows.

- Which department prepares your voluntary sustainability report/information? (Q19)
- Were accountants utilized in preparing the sustainability report/information? (Q20)
- Why are accountants used in the sustainability reporting process? (factors listed) (Q21)
- What level of involvement has the accountant in the sustainability reporting process? (Q22)
- Why do you not use accountants in the sustainability reporting process? (Q23)

The fifth research question was concerned with what sustainability frameworks are currently being used in local government in Australia. Hypotheses 8, 9, 10 and 11 were developed to respond to this research question. Research that has been conducted in Australia is restricted to a small number of case study projects where it was found that local authorities are utilizing different frameworks (Herbohn and Griffiths 2008; Marr 2006; Potts 2004). The research conducted, though, is limited in both number of case study projects and number of participants in each case study (for example, Herbohn and Griffiths 2008; Marr 2006; and Potts 2004 examined a maximum of four local authorities each). Therefore, international research was examined to provide a wider viewpoint of this issue. Dickinson *et al.* (2005) found that the dominant framework used by mail survey respondents was the GRI framework (confirmed in Dumay *et al.* 2010) with 70% of respondents having heard of the guidelines and 50% of respondents having referred to this framework. Further, whilst this mail survey was conducted from an international perspective, it is interesting to note that 55% of respondents were from Australia.

For this current research study, it is predicted that this international trend will continue when Australian local organizations are examined from a wider perspective. It is expected that the leading framework in Australian local government will also be the GRI framework. Therefore, Hypothesis 8 is stated as follows.

H_8: Local government authorities in Australia utilize the GRI framework in their sustainability reporting practices

To test this hypothesis, the responses to questions 25 to 28, and question 33 in the mail survey were analyzed. These questions were as follows.

- Have you heard of the Global Reporting Initiative (GRI) or the GRI Public Agency Sector Supplement (PASS)? (Q25)
- Do you use the GRI or PASS recommended guidelines in preparing the external voluntary sustainability reports? (Q26)
- How important are the GRI and PASS in the preparation of your voluntary sustainability report/information? (Q27)
- Why do you use the GRI/PASS guidelines? (factors listed) (Q28)
- Do you refer to any other reporting guideline(s) in the preparation of your voluntary sustainability report/information? (Q33)

It was anticipated that there would be a lack of consistency in the reporting indicators being utilized in sustainability reporting as found in prior research (Tort 2010; Sciulli 2009; Guthrie and Farneti 2008; Herbohn and Griffiths 2008; Lamprinidi and Kubo 2008; Mladenovic and van der Laan 2007; Mercer and Jotkowitz 2000). Thus, Hypothesis 9 is stated as follows.

H_9: There is no consistent core of reporting indicators being utilized in sustainability reporting by the local government sector in Australia.

To test this hypothesis, the responses to questions 31 and 32 in the mail survey were analyzed. These questions were as follows.

- How important do you consider the reporting of each of the following elements in regards to voluntary sustainability reporting to your external stakeholders? (Q31)

- Of those reporting elements considered most important, how significant is each of the following factors in explaining why they are important to your organization? (Q32)

Hypothesis 9 leads to the development of Hypothesis 10. With Guthrie and Farneti (2008) concluding that the GRI framework is too generic for all public sector organizations, it is anticipated that the lack of consistency in reporting elements is due to the GRI reporting framework not being specific to the needs of local government in Australia. Thus, Hypothesis 10 is developed as follows.

H_{10}: The GRI reporting framework is not specific to the needs of the local government sector in Australia.

To test this hypothesis, the responses to questions 24, 29 and 30 in the mail survey were analyzed. These questions were as follows.

- What type of reporting method(s) do you predominantly use in reporting voluntary sustainability information? (Q24)

- How important is each of the following factors in restricting the use of either or both of these guidelines? (Q29)

- How important are each of the following factors in explaining why you do not utilize the GRI or PASS recommended guidelines? (Q30)

Prior research has indicated that the term sustainable development has different meanings to different users (Farneti and Guthrie 2009; Guthrie and Farneti 2008). It is expected that no consistent definition of sustainable development is being utilized in local government in Australia. Therefore, Hypothesis 11 is developed as follows.

H_{11}: There is no consistent definition of sustainable development being used by local government authorities in Australia.

To test this hypothesis, the response to questions 34 in the mail survey were analyzed with further explanation of why authorities are using particular definitions provided in question 35. These questions were as follows.

- What definition of sustainable development do you use to guide the preparation of your voluntary sustainability report/information? (Q34)
- How important is each of the following factors in explaining why you have chosen this definition of sustainable development? (Q35)

To provide additional insight into sustainability reporting in local government in Australia, interviews were conducted. The process undertaken in planning and undertaking the interviews will now be examined.

5.5 Interviews

5.5.1 Interview Subjects/Sample

To provide support and elaboration of data provided by mail survey respondents, a number of in-depth interviews were conducted. Interview subjects were drawn from two categories within the Australian Classification of Local Governments (ACLG). Doing so allowed for an in-depth comparison of the extent of sustainability reporting across similar sized authorities and allowed for analysis to be conducted between categories.

The first category, 'urban regional' was chosen as it represents both the mid-range of the urban categorization and is the largest category within the urban categorization (representing approximately 46% of all urban local authorities). For local governments to be included in this category, they have to have a population density of more than thirty persons per square kilometre and be part of an urban centre with a population of less than 1,000,000 and be predominantly urban in nature. One hundred and fifteen local authorities fitted within this category.

To allow a comparison of urban local authorities with rural local authorities, a comparative category in the rural classification system was chosen, being 'Agricultural'. This category represents the mid-range category of all rural local authorities and represents approximately 76% of all rural local authorities. For authorities to meet this category, they must have a population of less than 20,000 and a population density of less than thirty persons per square kilometre. This category is separated into four different population sizes as shown in Table 5.2.

Table 5.2
ACLG Agricultural Category

Agricultural Category	Population Size	Number of Local Government Authorities
Very Large	10,001 – 20,000	56
Large	5,001 – 10,000	56
Medium	2,001 – 5,000	54
Small	Up to 2,000	70
Total		236

Previous research (Bajracharya and Khan 2004) has indicated that a factor influencing the adoption of sustainable development principles is the level of resources available to local government authorities. It was found that authorities with greater resource bases were more likely to engage in sustainability initiatives whilst authorities with smaller resource bases were less likely to engage in sustainability initiatives. Therefore, to allow for a comparison against urban local government organizations, authorities that met the 'very large' and 'large' categorizations within the agricultural category were chosen (providing a total of 112 authorities across the two categories, see Table 5.2). It was thought that by targeting this sub-category, it would provide a good summation of authorities within the

rural category that are not as constrained by resource levels in comparison to the two other sub-categories within the agricultural category.

Thus, the sampling frame for this study was all local government authorities in Australia which met the urban regional category or very large/large agricultural category within the ACLG. This provided for a total of 229 authorities across seven states of Australia as provided in Table 5.3, with the highest number of local authorities situated in NSW, Victoria and Queensland.

Table 5.3
Sampling Frame
Number of Local Authorities

State of Australia	Number of Urban Regional Local Authorities	Number of Rural Agriculture (Very large/Large) Local Authorities	Total by State
NSW	39	44	83
Victoria	22	23	45
Queensland	26	7	33
Western Australia	10	7	17
South Australia	11	16	27
Tasmania	5	14	19
Northern Territory	4	1	5
Total	117	112	229

To provide for in-depth comparisons across states, purposeful sampling was utilized (Patton, 1990); that is, sampling that involves purposeful selection rather than by random selection. Doing so allowed for the selection of information-rich cases to be chosen that are applicable to the research in question. This study, by utilizing purposeful sampling

techniques, focused on four states of Australia and followed a similar approach to that of Pini and Haslam McKenzie (2006 p 31) who, in focusing on environmental sustainability management across four States of Australia, reasoned that past literature has typically focused on single States (for example, Kupke 1996) and to provide for comparative analysis, several States needed to be investigated.

This study focused on the States of NSW, Victoria, Queensland and Tasmania with the Northern Territory, Western Australia and South Australia eliminated from the interview process. This is due to a combination of factors, primarily due to the small number of local authorities that fit within these two categories (5, 17 and 27, respectively – Table 5.3) and resource constraints of the researcher. Whilst Tasmania also has a small number of local authorities (nineteen), with the research originating in Tasmania it was thought that there may be a certain level of interest by Tasmanian local authorities to be involved in the interview process. Thus, Tasmania was left in the interview sample. Interviews therefore, were focused across four states of Australia, being NSW, Victoria, Queensland and Tasmania, providing for a total sample size of 180 (as shown in Table 5.4).

Table 5.4
Number of Local Authorities Included in Sample

State of Australia	Number of Urban Regional Local Authorities	Number of Rural Agriculture (Very large/Large) Local Authorities	Total by State
NSW	39	44	83
Victoria	22	23	45
Queensland	26	7	33
Tasmania	5	14	19
Total	92	88	180

5.5.2 Invitation to Participate in Interview Process

Initial contact was made with potential participants by sending a letter to the CFO explaining the purpose of the research project seeking their assistance in the interview process[4]. A consent form was also provided setting out the study procedures, the risks, the rights to review and withdrawal from the process and a guarantee of confidentiality[5]. The interview subjects were required to sign the consent form prior to the interviews being undertaken. In an effort to improve the number of responses, two techniques were utilized. The first involved including in the mail-out a copy of the major findings from the mail survey document. Doing so highlighted and increased the credibility and the importance of the study. The second technique involved one subsequent re-mailing of the letter approximately three weeks after the initial mailing.

5.5.3 Pilot Testing

A preliminary version of the interview questions was pilot-tested before the formal interview process began. The purpose of the pilot-test was to identify any unforeseen problems in question wording or question sequencing. The pilot-test involved the pre-testing of the questions by two colleagues within the School of Accounting and Corporate Governance at the University of Tasmania. The pilot-test results were then examined and any necessary changes identified made to the questions.

5.5.4 Type of Interview

Semi-structured interview techniques were utilized for this study. This technique allowed the interviewer to have an overall structure and direction but also allowed for flexibility to include unstructured questions. The interviewer was able to ask related, unanticipated questions that were not originally included in the interview questions. By allowing such a technique, it allowed for the possibility of unexpected and insightful information coming to light, thus enhancing the study's findings (Hair *et al.* 2003).

[4] Refer Appendix III for interview invitation letter.
[5] Refer Appendix IV for Statement of Informed Consent.

5.5.5 Interview Questions

The interview questions[6] were separated into four main sections in an effort to gather data to test the five research questions were developed for this study. At a minimum, each interview participant was asked sixteen questions across the four sections. The sections examined the level and type of sustainability reporting being conducted, key factors leading to the adoption of sustainability reporting, the importance of accountants in sustainability reporting and sustainability reporting frameworks.

5.5.6 Interview Material

All interviews were tape-recorded with permission from the interviewee and then transcribed from the tapes by an independent person. This ensured that the original data were preserved and the tape recordings checked for accuracy. The transcripts were checked against the tapes and then forwarded to the interviewees to ensure that they agreed that the transcripts were a true and accurate record.

The data analysis techniques utilized in testing the collected data will now be discussed.

5.6 Data Analysis Techniques

Collected data consisted of two categories: quantitative and qualitative. The quantitative data collected from the mail survey primarily involved the use of the Statistical Package for the Social Sciences (SPSS) (version 18) for statistical analysis but also involved the use of OriginPro (8) statistical software for non-parametric testing. Testing initially included descriptive statistics to summarize and describe the mail survey data. This included the usage of frequencies, mean scores, standard deviations and maximum and minimum scores. In doing so, it provided an initial summation of the mail survey data results.

Further testing was then conducted on the mail survey data utilizing both parametric and non-parametric test techniques. This incorporated t-tests, one-sample and independent group tests for those mail survey questions that involved interval scale techniques. For

[6] Refer Appendix V for a listing of the interview questions.

all single sample parametric t-tests, the test value adopted was three, on an interval scale of one to five. This is based on the assumption that three is the central point, with data points under three reflecting negative responses to the question whilst data points greater than three reflected positive responses to the question. Other parametric tests conducted included Pearson product-moment correlation testing to highlight correlations between variables and one-way analysis of variances (ANOVA's) which examined mean differences from more than two groups and identified any significant differences between these groups.

The data gathered from the interview process was analyzed using qualitative data techniques. This involved the utilization of manual analyses techniques in an effort to identify patterns, themes and meanings (Leedy & Ormrod 2005). The process of analysis to be followed was similar in approach to that provided by Schmidt (2004). Categories for the analysis were initially set-up after a process of detailed reading of the interview transcripts and then developed into a guide for coding from which the interviews were subsequently coded.

5.7 Summary

The adoption of a multi-method approach in this study allowed for both a broad cross-sectional analysis through the use of mail surveys and an in-depth analysis through the use of interviews. It provided for a more complete picture to be developed of the study.

The next chapter provides a descriptive analysis of the mail survey responses and the analysis in relation to the first three research questions posed for this research study.

Chapter 6 Data Analysis and Results: Mail Survey–Part I

6.1 Introduction

The results of the mail survey relating to research questions 1-3 are discussed in this chapter with research questions 4-5 being discussed in Chapter 7. The discussion is divided into three sections. The first section describes the data collection process whilst the second section details the descriptive analysis of the survey responses. The third section provides the analysis that was conducted in relation to the first three research questions.

6.2 Data Collection Process

6.2.1 Introduction

This discussion includes the pilot-survey results, response rates, problems encountered with the data collection process, reliability and non-response bias.

6.2.2 Pilot Survey

Prior to the mail survey being sent out, the survey was pilot-tested in two stages[1]. From the first stage, three questions were identified as requiring amendment to provide for clearer expression. These questions were amended to make the mail survey more user-friendly. The second stage, being the formal pre-test stage, achieved a response rate of 20% (six responses). The pilot-test results were reviewed and any necessary changes made to the survey document. There were no major changes resulting from the pilot survey.

Subsequent to the pilot survey, the formal survey was sent out to potential respondents. The response rate to the mail survey is now discussed.

6.2.3 Response Rates

The mail survey was sent to a total of 536 potential respondents in March 2009. One

[1] Refer Section 5.3.3 for details.

survey was returned due to an incorrect address, providing a net sample of 535. A total of 191 responses were returned which provided an overall response rate of 35.70%. One response was eliminated as two responses were received from the same council. As this was the only council that had completed two responses, if left in, it could have introduced bias into the survey results; thus, it was removed. Of the two responses received, one was completed by the finance manager and the other by the corporate planning manager. As the survey document was targeted at the CFO, it was thought that the finance manager's response would be more closely aligned to the CFO's response. Thus, the corporate planning manager's response was removed from the sample for the purposes of analysis. However, whilst being removed from the sample, any differences in the two responses may be useful in discussion later to explain differences in results between survey respondents.

The final sample for this study was, therefore, 190 usable responses equating to a usable rate of 35.51% (Table 6.1). This response rate was consistent with previous Australian studies conducted in this area of research, ranging from 25% for the National Local Sustainability Survey conducted in 1996 by Whittaker (1997) to 52% in conducting an LA21 study focusing on local government in South Australia by Kupke (1996).

Table 6.1
Mail Survey - Response Rates

Survey Document	**Number**	**%**
Local Government Bodies	536	
Incorrectly Addressed	1	
Potential Respondents	535	
Returned Responses	191	35.70
Eliminated	1	
Usable Responses	190	35.51

6.2.4 Receipt of Surveys

As completed surveys were received, each was opened, date-stamped and consecutively numbered. Each survey was then examined to ensure that it was acceptable for processing. The completed surveys were subsequently sorted and then coded manually.

A preliminary code structure had been developed during the pilot stage of the survey design in an attempt to highlight and eliminate any possible coding issues early on in the process. This code structure was used to code the surveys manually. Manually coding each survey allowed for the inputting of the data into a computer spread-sheet to be straightforward and less time consuming.

6.2.5 Problems of Data Collection

Some respondents did not complete all of the questions in the mail survey. No respondent omitted answers to more than four questions. There were two main sections of the survey that were not fully answered, being Section 2 and Section 5. Section 2 examined the level and type of voluntary sustainability reporting and Section 5 investigated what guidelines are utilized in the preparation of the sustainability report. Where a question was not answered by respondents, to enhance the validity of the study (Cavana *et al*. 2001), the blank responses were recorded as a nil ('0') response.

6.2.6 Reliability

To test the internal consistency and reliability of the multi-item measurement scale in the survey, Cronbach alpha testing was conducted. This method is one of the most accepted methods of reliability testing today (Thomas *et al*. 2005). Table 6.2 presents the Cronbach alpha coefficient for the major multi-item scaled questions used in the statistical analysis. Nunnaly (1978) indicated that a 0.70 coefficient is generally deemed to be an acceptable reliability coefficient. The results of these calculations indicate overall reliability and consistency as the values exceed conventional levels of acceptability.

Table 6.2
Mail Survey - Cronbach Alpha Reliability Analysis

Question	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items
7	.899	.894	12
8	.916	.917	13
10	.830	.831	4
13	.914	.915	11
17	.839	.837	6
21	.764	.810	7
22	.794	.789	8
24	.795	.796	5
28	.951	.947	9
29	.971	.971	7
30	.875	.865	7
31	.969	.969	42
32	.883	.882	5
35	.922	.923	5

6.2.7 Non-Response Bias

The non-response rate for this survey was 64.49% (346 respondents). That is, of the 536 surveys that were mailed out, 64.49% of all potential respondents did not respond. Possible explanations for this were lack of resources and time to complete the survey (three potential respondents did make contact and advise accordingly) or that they may have had no interest in the subject matter. This latter explanation was consistent with a study conducted by Oppenheim (1966) who considered that similar levels of non-response rates are typical in samples for respondents who may have no special interest in the subject.

Non-response in surveys may introduce bias as the actual returns may not be representative of the population. To determine if bias had been introduced into this study, a method developed by Oppenheim (1966) was utilized. Using this method, the survey results of respondents who sent their surveys in on time were compared with the survey results of late respondents. Oppenheim argued that respondents who sent in their surveys late are similar to non-respondents. Where there was no bias and, thus, the results were representative of the population, it would be expected that the survey results would be similar between the respondents who sent their surveys in on time and the late respondents.

To compare survey results between the two types of respondents, the mean response scores for respondents that sent their surveys in on time were compared with respondents who sent their surveys in late. It was assumed that where no bias existed, the mean response scores would be similar. Respondents were deemed to have sent their surveys in on time if the mail survey was received prior to the first reminder letter being sent out. There were sixty survey responses received by the due date and 130 responses received late. Mean responses were calculated for questions 1 to 5 being the main descriptive data of the survey document. The mean responses were then compared by conducting a Levene test for equality of variances and t-test for equality of means. The differences were not significant at the 0.05 level for all questions (Table 6.3). Therefore, it can be assumed that there are no significant differences between the on-time respondents and late respondents.

Table 6.3
Mail Survey - Response Bias Results
Levene's Test and t-test for Equality of Variances for Non-Response Bias

	Equal Variances	Levene's Test for Equality of Variances – F Value	Sig. level	t-test for Equality of Means	df	Sig. (2-tailed)
1	are assumed	1.226	.270	-.685	188	.494
	not assumed			-.731	135.242	.466
2	are assumed	.123	.726	1.415	188	.159
	not assumed			1.428	117.444	.156
3	are assumed	.056	.813	.434	188	.665
	not assumed			.435	115.886	.664
4a	are assumed	.922	.338	.816	188	.415
	not assumed			.798	108.830	.426
4b	are assumed	.007	.932	.883	188	.379
	not assumed			.881	114.208	.380
5	are assumed	.061	.806	.311	188	.756
	not assumed			.310	114.414	.757

6.3 Descriptive Survey Data

6.3.1 Introduction

The descriptive data embracing the mail survey are now discussed to develop a profile of respondent organizations. Such data include the location of the local government authority, total revenue received and classification according to the Australian Classification of Local Government (ACLG).

6.3.2 Respondents to the Survey

Analyses were conducted of the survey responses to identify the role that the respondent performed in the organization. The majority was completed by senior officers within the organization (Table 6.4). Of the total responses, 47.89% of the surveys were completed by the financial services manager/director, 24.74% by the general manager or chief

executive officer and 8.95% by the finance officer/accountant. The remaining responses were completed by the sustainability manager/director (6.32%), the environmental programs manager/director (2.63%), the corporate planning or physical services manager/director (1.58% each, respectively) and the corporate secretary (.53%).

Table 6.4
Mail Survey - Type of Respondent

Respondent	**Number**	**%**
General Manager/Chief Executive Officer	47	24.74
Financial Services Manager/Director	91	47.89
Sustainability Manager/Director	12	6.32
Environmental Programs Manager/Director	5	2.63
Corporate Planning Manager/Director	3	1.58
Physical Services Manager/Director	3	1.58
Finance Officer/Accountant	17	8.95
Corporate Secretary	1	.53
Did Not Respond	11	5.78
Total	190	100%

6.3.3 Location of Local Government Authority

Analyses were conducted of the State or Territory in which the local government authority was located. As shown in Table 6.5, the highest response rate was received from NSW (30.53%) with Western Australia having the second highest response with a rate of 18.42%.

However, when these response rates were compared against the total number of potential mail survey respondents in each State/Territory, differing results were found. The results indicate that a higher proportion of local authorities responded from Tasmania with a 55.56% response rate with the next highest being, NSW, Queensland, South Australia

and Victoria who all provided similar response rates in the range of 34.29% – 40.58%. An explanation for the higher response rate from Tasmania may have been that there was more understanding and interest by local authorities with the mail survey instrument originating in Tasmania.

Table 6.5
Mail Survey – State/Territory Respondent Organization Situated in

State or Territory	Number of Respondents	% of Respondents	Number of Local Authorities	% of Local Authorities that Responded
NSW	58	30.53	147	39.46
Northern Territory	3	1.58	16	18.75
Queensland	28	14.74	69	40.58
South Australia	24	12.63	70	34.29
Tasmania	15	7.89	27	55.56
Victoria	27	14.21	75	36
Western Australia	35	18.42	132	26.52
Total	190	100%	536	

6.3.4 Size of Local Government Organization Respondents

Local authorities were asked to provide, from their latest financial statements, the organization's total revenue, as detailed in Table 6.6. Results were quite evenly distributed across categories with the greatest percentage of respondents (26.84%) in the revenue range $20,000,001 - $50,000,000.

Table 6.6
Mail Survey – Total Revenue of Respondent Organizations

Total Revenue Value	Number	%
Less than $5M	21	11.05
$5,000,000 - $10,000,000	23	12.11
$10,000,001 - $20,000,000	38	20
$20,000001 - $50,000,000	51	26.84
$50,000001 - $100,000,000	31	16.32
Greater than $100M	26	13.68
Total	190	100%

6.3.5 Classification of Respondents

Local authorities were asked to indicate, according to the Australian Classification of Local Government (ACLG), the classification of their organization and residential population of their local government area (Table 6.7). The response rate from rural respondents was greater than for urban respondents, with a 53.16% response rate in comparison to a 46.84% response from urban respondents (Column 3).

By further categorizing the respondents, it was found that urban authorities from regional towns and metropolitan developed urban areas provided higher response rates in the urban category (46.07% and 43.82%, respectively, Column 4) and agricultural authorities provided the highest response rate in the rural category (60.40%). Results were further compared to the actual number of organizations within each classification (Column 5). By doing so, it was found that a higher percentage of surveys were received from rural authorities in the significant growth (83.33%) and remote (53.03%) classifications in comparison to the agricultural classification (27.23%) when compared to the actual

number of organizations within each category.

Table 6.7
Mail Survey – ACLG Classification

Classification	**Number** (1)	**%** (2)	**Total %** (3)	**% of Classification** (4)	**%of Actual Number** (5)
Urban					
Fringe	7	3.68		7.86	10.61
Regional Town/City	41	21.58		46.07	51.95
Metropolitan Developed	39	20.53		43.82	43.33
Capital City	2	1.05		2.25	28.57
Total Urban	89		46.84	100	
Rural					
Remote	35	18.42		34.65	53.03
Agricultural	61	32.11		60.40	27.23
Significant Growth	5	2.63		4.95	83.33
Total Rural	101		53.16	100	
Total	190	100%	100%		

Respondents also provided, according to the ACLG, the residential population of their local government areas (Table 6.8). Of urban respondents, responses were quite evenly distributed between three population categories (less than 30,000, 30,000 – 70,000 and greater than 120,000 with response rates of 25.84%, 28.09% and 26.97%, respectively) with the least percentage of responses from the 70,001 – 120,000 category (19.10% of

total urban responses). Whilst for rural authorities, the greatest number of responses was received from authorities of less than 2,000 (33.66% of total rural responses, Column 4).

Table 6.8
Mail Survey – ACLG Residential Population

Classification	**Number** (1)	**%** (2)	**Total %** (3)	**% of Classification** (4)
Urban				
Less than 30,000	23	12.11		25.84
30,000 – 70,000	25	13.16		28.09
70,001 – 120,000	17	8.95		19.10
Greater than 120,000	24	12.63		26.97
Total Urban			46.84	100
Rural				
Less than 2,000	34	17.89		33.66
2,000 – 5,000	24	12.63		23.76
5,001 – 10,000	19	10		18.81
10,001 – 20,000	24	12.63		23.76
Total Rural			53.16	100
Total	190	100%	100%	

In the following sections, the responses of the mail survey respondents are examined and discussed in relation to the first three research questions.

6.4 Sustainability Reporting by Local Government Authorities

The first research question sought to examine and determine if sustainability reporting is being conducted by local government authorities. It was expected that local government in Australia, whilst reporting may be at a minimum, does, in fact, report on sustainability (Farneti and Guthrie 2009; Herbohn and Griffiths 2008; Jigsaw Services 2004; Potts 2004). Of what reporting there is, evidence suggests that there will be no consistency in the choice of reporting media used to report this sustainability information (Farneti and Guthrie 2009; Herbohn and Griffiths 2008; Jones *et al.* 2005) and reporting will tend to be focused on one component of sustainability reporting rather than on an integrated viewpoint of sustainability (GRI 2004; ICLEI 2001; Lewis 2000; Whittaker 1996).

6.4.1 Introduction

Local authorities were asked to indicate if they reported any voluntary sustainability information. To provide a frame of reference for participants, a definition of sustainable development and sustainability reporting was provided (as previously developed in Section 2.3.3 and 2.4) as follows.

Table 6.9
Mail Survey – Definitions

Term	Definition Provided
Sustainable Development	Development undertaken at the local community level which seeks to maintain, integrate and, where possible, improve environmental protection, social equity and economic/financial growth within the community.
Sustainability Reporting	An integrated approach to reporting to stakeholders that focuses on the environmental, social and economic activities undertaken that seek to achieve specific objectives in the pursuit of sustainable development by the local government authority.

Whilst the definition for 'sustainability reporting' provided to participants focused on an integrated reporting perspective (involving environmental, social and economic reporting components), to determine if participants were reporting on any particular areas of sustainability, they were asked to indicate if they reported voluntary sustainability

information to their external stakeholders in any of the three areas of environmental, social and/or economic reporting. To aid respondents, examples of each type of voluntary reporting were provided[2].

This approach can be contrasted with that of Dickinson *et al.* (2005) who, in conducting research utilizing a mail survey approach, allowed survey respondents to self-identify if they were reporting on sustainability. Following such an approach did not provide for a measure against which respondents could compare themselves , thus, with the end result that a range of reporting activities was identified by respondents as representing sustainability reporting (Leeson and Ivers 2005). The methodology followed in this current study was considered the preferred approach in that a frame of reference was provided for survey respondents to assess their current reporting practices against.

Of the total respondents, results were evenly distributed between those that do report (ninety-five respondents or 50.00% of total responses) voluntary sustainability information and those that do not report sustainability information to their external stakeholders (ninety-five respondents or 50.00% of total responses), as indicated in Table 6.10. For those local authorities that do report sustainability information, results were examined to determine if they reported on one, two or three components of sustainability. It was found that twelve respondents reported on one component, seventeen respondents on two components and sixty-six respondents reported on all three components. Thus, sustainability reporting that incorporated environmental, social and economic components (hereafter known as integrated reporting) was undertaken by the majority of reporting respondents (69.47%) rather than an individual reporting focus of one or two reporting components of sustainability.

[2] Refer Appendix I for copy of mail survey.

Table 6.10
Mail Survey – Reporting on Sustainability

Report on Sustainability	Number	%	Number	% That Report
Yes	95	50		
Environmental			78	82.11
Social			86	90.53
Economic			80	84.21
Integrated			66	69.47
No	95	50		
Total	**190**	**100%**		

The data were further analyzed to determine the type of sustainability reporting local governments engage in – whether it be environmental, social and/or economic. The results from Table 6.10 indicate that the highest level of sustainability reporting being undertaken was social reporting with 90.53% of reporting respondents reporting on social information (that is, either reporting on its own or in combination with one other or two other reporting components).

6.4.2 When Did Sustainability Reporting Commence?

Analyses were conducted to determine when respondents first commenced reporting on voluntary sustainability information (Table 6.11). It appears that there was an increase in this type of reporting in the 2005 year with smaller percentage increases in subsequent years, being 2006 to 2008. It is interesting to note that these results are similar across each strand of reporting (whether it be environmental, social, economic or from an integrated reporting viewpoint) ranging from 21.80% through to 30.23% during the 2005 year. Further investigation is required in the interview stage of this study to provide a possible explanation for this increase in the 2005 year but then a subsequent decline in first-time adopter's post 2005.

The category 'prior to the 2005' year also recorded a higher percentage rate of first-time reporting in comparison to other years (ranging from 24.36% to 31.82%). However, without the exact year in which each respondent commenced voluntary sustainability reporting, it is difficult to determine if there were a particular year, prior to 2005, that had a higher percentage of first-time reporters.

Table 6.11
Mail Survey – Year Commenced Sustainability Reporting[3]

Year Commenced	Environmental %	Social %	Economic %	Integrated %
2008	11.54	5.81	5.00	9.09
2007	15.38	10.47	11.25	11.36
2006	10.26	10.47	10.00	9.09
2005	21.80	30.23	28.75	22.73
Prior to 2005	24.36	29.07	31.25	31.82
Unknown	16.66	13.95	13.75	15.91
Total	100%	100%	100%	100%

The local authorities that did report voluntary sustainability information were asked why they report this information.

6.4.3 Why do Organizations Report Voluntary Sustainability Information?

Of the 190 mail survey respondents, ninety-five report voluntary sustainability information to their external stakeholders, whether it be environmental, social, and economic or an integrated approach to reporting (as previously reported in Table 6.10). Respondents were asked to indicate the importance of twelve reasons (using a five-point scaled response from very unimportant to very important) in helping to explain why they report this information (Table 6.12).

[3] Refer Appendix VIII for absolute numbers.

Table 6.12
Mail Survey – Reasons Why Organizations Report on Sustainability[4]

Reasons	Did Not Respond %	Very Unimportant %	Unimportant %	Neutral %	Important %	Very Important %
Key Stakeholders	3.16	1.05	3.16	5.27	53.68	33.68
Public Image	-	-	-	11.58	53.68	34.74
Pressure – Senior Management	5.26	2.11	5.27	40	37.89	9.47
Pressure - Councilors	6.32	3.16	3.16	35.79	42.10	9.47
Pressure – Stakeholder Groups	7.37	1.05	5.26	31.58	43.16	11.58
Pressure - Government	5.26	1.05	4.21	26.32	45.26	17.90
National/World concerns	6.32	4.21	4.21	29.47	45.26	10.53
Public Awareness	4.21	1.05	3.16	10.53	50.53	30.52
Education	6.32	-	1.05	10.53	51.58	30.52
Community Attitudes	6.32	-	1.05	11.53	48.42	33.68
Streamline Reporting	6.32	5.26	7.37	28.42	42.10	10.53
Organizational Commitments	2.11	-	1.05	16.84	54.74	25.26

In examining Table 6.12, there were six major reasons viewed by authorities as being important to very important in explaining why sustainability information is reported by organizations. These reasons were: improved engagement with key stakeholders (87.36%); improved public image (88.42%); to raise public awareness of sustainability issues (81.05%); education of the community and to change community attitudes (82.10% each) and the demonstration of progress towards organizational commitments (80%).

Approximately 50% of respondents considered pressure received from targeted groups as

[4] Ibid.

important to very important in explaining why they report sustainability information. Pressure from State and Federal Government was also considered by 63.16% of respondents as important to very important, whilst other reasons included pressure from stakeholder groups (54.74%), pressure from councillors (51.57%) and response to pressure from senior management (47.36%).

To determine if any of these reasons were considered significant in explaining why organizations report on sustainability, a one-sample t-test was conducted. As can be seen, in Table 6.13, all twelve reasons were found to be significant at the .001 level in influencing respondents to report sustainability information.

Table 6.13
T-Test
Mail Survey - Why Organizations Report on Sustainability: Test Statistics

Reasons Respondents Report on Sustainability	Mean	Std. Deviation	Number	t-test	df	Sig. (2 tailed)
Improved engagement with key stakeholders	4.20	.774	92	14.822	91	.000
Improved public image	4.23	.643	95	18.659	94	.000
Response to pressure from senior management	3.50	.838	90	5.660	89	.000
Response to pressure from councillors	3.55	.853	89	6.089	88	.000
Response to pressure from stakeholder groups	3.64	.819	88	7.288	87	.000
Response to pressure from State and Federal Government	3.79	.841	90	8.896	89	.000
Show alignment to national and world concerns	3.57	.916	89	5.904	88	.000
Raise public awareness of sustainability issues	4.11	.809	91	13.088	90	.000
Educate the community	4.19	.672	89	16.717	88	.000
Change community attitudes	4.22	.687	89	16.824	88	.000
Streamline reporting processes	3.48	.990	89	4.605	88	.000
Demonstrate progress towards organizational commitments	4.06	.689	93	14.910	92	.000

The data were further analyzed in an effort to determine if particular types of reporter

place more or less emphasis on each of the twelve reasons by conducting independent group t-testing. This would perhaps help to explain further why particular organizations choose to report on sustainability. Respondents were categorized into two reporting types (integrated reporters that report on the three components of sustainability and those authorities that choose to report on less than the three components of sustainability (hereafter referred to as non-integrated reporters) with results provided below in Table 6.14.

Table 6.14
Independent Groups T-test
Mail Survey - Why Organizations Report on Sustainability and Type of Reporter: Test Statistics

Reasons Respondents Report on Sustainability	t-test	df	Sig. (2-tailed)	Mean Diff	Std. Error Difference
Improved engagement with key stakeholders	1.226	90	.223	.219	.179
Improved public image	.592	93	.555	.085	.144
Response to pressure from senior management	-.553	88	.582	-.108	.196
Response to pressure from councillors	.357	87	.722	.071	.200
Response to pressure from stakeholder groups	1.012	86	.315	.194	.191
Response to pressure from State and Federal Government	.082	88	.935	.016	.195
Show alignment to national and world concerns	2.047	87	.044	.429	.210
Raise public awareness of sustainability issues	2.626	89	.010	.472	.180
Educate the community	1.084	87	.281	.168	.155
Change community attitudes	.285	87	.777	.046	.161
Streamline reporting processes	2.053	87	.043	.465	.227
Demonstrate progress towards organizational commitments	1.586	91	.116	.247	.156

From examining the results, it appears that the type of reporter may help to explain why respondents report on different sustainability information. There was found a significant difference between integrated and non-integrated reporters for reasons 7, 8 and 11, that is, integrated reporters are different from non-integrated reporters in explaining why they report. Reason 7 is in relation to showing alignment to national and world concerns ($t=2.047$, $p<.05$), reason 8 is raising public awareness of sustainability issues ($t=2.626$, $p<.05$), and reason 11 is streamlining reporting processes ($t=2.053$, $p<.05$). On further analysis of these three reasons (Table 6.15), all three provided higher mean scores for integrated reporters in comparison to non-integrated reporters, that is, integrated reporters place more importance on these reasons than non-integrated reporters in explaining why they report.

Table 6.15
Mail Survey - Why Organizations Report on Sustainability: Descriptive Statistics

Reason	Classification	Number	Mean	Std. Deviation	Std. Error Mean
Show alignment to national and world concerns	Integrated Non-Integrated	63 26	3.70 3.27	.873 .962	.110 .189
Raise public awareness of sustainability issues	Integrated Non-Integrated	64 27	4.25 3.78	.735 .892	.092 .172
Streamline reporting processes	Integrated Non-Integrated	63 26	3.62 3.15	1.007 .881	.127 .173

To determine the possible effect of mandatory reporting, further testing was conducted.

6.4.4 Mandatory Reporting Effect

Further testing was conducted to determine if there were a significant difference in responses between NSW respondents that have mandated SoE reporting and all other respondents in answering whether or not they reported on voluntary sustainability information.

Using independent group t-tests, NSW respondents were found to be reporting at significantly higher levels for voluntary environmental reporting ($t=-2.323$, $p<.05$), economic reporting ($t=-3.3118$, $p<.005$) and from an integrated reporting perspective ($t=-3.337$, $p<.005$), as shown in Table 6.16. This higher level of voluntary reporting by NSW respondents indicates that there may be a heightened awareness of voluntary sustainability reporting brought about by the mandatory reporting requirements of SoE reporting. This is highlighted in further analysis of the reasons that have lead to this type of reporting - with no significant difference found between NSW authorities and all other authorities for the reason 'response to pressure from State and Federal government' ($t=.173$, $p>.05$). With there being no significant difference, this suggests that the NSW respondents are no more pressured by State and Federal government to report sustainability information than other states but yet they report at higher levels.

Table 6.16
Independent Groups T-Test
Mail Survey - Reporting on Voluntary Sustainability Information: Test Statistics

Type of Reporting	t-test	df	Sig (2-tailed)	Mean Difference	Std. Error Difference
Environmental	-2.323	188	.021	-.178	.077
Social	-1.825	188	.070	-.143	.078
Economic	-3.118	188	.002	-.238	.076
Integrated	-3.337	188	.001	-.245	.073

The local authorities that did report on voluntary sustainability information were asked how important different reporting media were in reporting sustainability information to their stakeholders.

6.4.5 Importance of Different Reporting Media

Local authorities were asked to indicate the importance of thirteen internal and external reporting media (using a five-point scaled response from very unimportant to very important) in helping to determine if particular reporting media are considered more

important than other reporting media in reporting of sustainability information (Table 6.17).

Table 6.17
Mail Survey – Importance of Different Reporting Media[5]

Reporting Medium	Did Not Respond %	Very Unimportant %	Unimportant %	Neutral %	Important %	Very Important %
Stand-alone Sustainability Report	10.53	3.16	10.53	34.74	26.32	14.74
Annual Report	1.05	1.05	-	5.26	47.37	45.26
Corporate/ Strategic Report	6.32	-	3.16	11.58	49.47	29.47
Operational Plans	5.26	-	4.21	12.63	52.63	25.26
SoE Reports	8.42	3.16	4.21	29.47	40	14.74
Community Reports	7.37	1.05	3.16	21.05	54.74	12.63
Budget Statements	3.16	-	2.11	12.63	48.42	33.68
Key Performance Indicator Reports	7.37	-	1.05	16.84	51.58	23.16
Council Minutes	5.26	-	1.05	24.21	42.11	27.37
Web-Site	3.16	-	1.05	11.58	49.47	34.74
Staff Training Manuals	7.37	2.11	5.26	35.79	36.84	12.63
Policy Documents	5.26	-	3.16	14.74	54.74	22.11
Management Reports	4.21	-	2.11	22.11	50.53	21.05

Several reporting media were viewed by respondents as being important to very important to their organization. The principal media were the annual report (92.63),

[5] Ibid.

budget statements (82.10%) and the web-site (84.21%).

A one-sample t-test was conducted to determine which reporting media were considered significant in reporting sustainability information. All reporting media were found to be significant at the .001 level in reporting of information as shown in Table 6.18. It had been expected that there would be no consistency in where sustainability information was being reported by local government authorities – with all reporting media considered important by respondents, this may not necessarily lead to consistency in sustainability reporting for local government in Australia.

Table 6.18
T-Test
Mail Survey - Importance of Reporting Media: Test Statistics

Reporting Medium	Mean	Std. Deviation	Number	t-test	df	Sig. (2 tailed)
Stand-alone Sustainability Report	3.44	1.017	85	3.946	84	.000
Annual Report	4.37	.688	94	19.351	93	.000
Corporate/Strategic Report	4.12	.751	89	14.113	88	.000
Operational Plans	4.04	.763	90	12.985	89	.000
SoE Reports	3.64	.927	87	6.474	86	.000
Community Reports	3.81	.756	88	10.012	87	.000
Budget Statements	4.17	.735	92	15.311	91	.000
Key Performance Indicator Reports	4.05	.693	88	14.146	87	.000
Council Minutes	4.01	.772	90	12.431	89	.000
Web-Site	4.22	.693	92	16.859	91	.000
Staff Training Manuals	3.57	.881	88	6.047	87	.000
Policy Documents	4.01	.727	90	13.201	89	.000
Management Reports	3.95	.736	91	12.252	90	.000

However, perhaps different type of reporter (integrated or non-integrated reporters) may view the level of importance of different reporting media differently. To determine if this may or may not be the case, independent groups t-testing was conducted with results provided in Table 6.19.

Table 6.19
Independent Groups T-Test
Mail Survey - Importance of Reporting Media by Type of Reporter: Test Statistics

Reporting Media	t-test	df	Sig (2-tailed)	Mean Difference	Std. Error Difference
Stand-alone Sustainability report	.438	83	.662	.107	.243
Annual Report	4.045	92	.000	.581	.144
Corporate/Strategic Report	1.613	87	.110	.283	.176
Operational Plans	.649	88	.518	.117	.180
SoE Reports	3.257	85	.002	.679	.208
Community Reports	2.542	86	.013	.435	.171
Budget Statements	.883	90	.380	.147	.167
Key Performance Indicator Reports	.726	86	.470	.119	.164
Council Minutes	.688	88	.493	.124	.180
Web-Site	1.284	90	.203	.203	.158
Staff Training Manuals	-1.291	86	.200	-.268	.208
Policy Documents	-1.853	88	.067	-.309	.167
Management Reports	.809	89	.420	.138	.171

From analyses of the results, three significant differences were found between the type of reporter and the importance of reporting medium. Integrated reporters consider the annual report ($t=4.045$, $p<.001$), SoE reports ($t=3.257$, $p<.01$) and community reports ($t=2.542$, $p< .05$) more important than non-integrated reporters whilst for all other reporting media there were no significant differences found. This was further evidenced on analysis of the mean scores of each of these three reporting media for integrated and non-integrated reporters (Table 6.20) - integrated reporters recorded higher mean scores for all three reporting media indicating that integrated reporters consider these three reporting media more important.

Table 6.20
Mail Survey - Importance of Reporting Media: Descriptive Statistics

Reporting Medium	Classification	Number	Mean	Std. Deviation	Std. Error Mean
Annual Report	Integrated	66	4.55	.560	.069
	Non-Integrated	28	3.96	.793	.150
SoE Reports	Integrated	62	3.84	.872	.111
	Non-Integrated	25	3.16	.898	.180
Community Reports	Integrated	62	3.94	.721	.092
	Non-Integrated	26	3.50	.762	.149

As can be seen, different types of reporter (integrated and non-integrated reporters) place different emphasis on the importance levels of different reporting media. Perhaps, therefore, consistency in reporting media for sustainability reporting may be being achieved in a small way across different reporters.

6.4.6 Reporting Media Being Utilized to Report Sustainability Information

To determine the types of report that voluntary sustainability information is actually being reported in, respondents were asked to identify which reporting media their organization's information was currently being reported in (Table 6.21).

Table 6.21
Mail Survey – Reporting Media Being Utilized[6]

	Reporting on Sustainability							
Reporting Medium	**Environmental Information**	**Social Information**	**Financial Information**	**1 Area %**	**2Areas %**	**3 Areas %**	**Total Reporting %**	**Total Non-Reporting %**
Stand-alone Sustainability Report	37	29	25	13.68	7.37	22.11	43.16	56.84
Annual Report	65	73	77	22.11	13.68	58.95	94.74	5.26
Corporate/ Strategic Report	53	56	59	14.74	9.47	47.30	71.58	28.42
Operational Plans	47	50	53	16.84	8.42	41.05	66.31	33.69
SoE Reports	37	20	20	17.89	4.21	17.89	39.99	60.01
Community Reports	32	41	39	16.84	7.37	28.42	52.63	47.37
Budget Statements	28	32	53	27.37	6.32	26.32	60.01	39.99
Key Performance Indicator Reports	36	36	36	-	-	37.89	37.89	62.11
Council Minutes	47	54	52	10.53	10.53	43.16	4.22	35.78
Web-Site	59	59	57	8.40	8.42	52.63	69.47	30.53
Staff Training Manuals	22	26	27	13.68	4.21	18.95	36.84	63.16
Policy Documents	42	43	44	13.68	4.21	37.89	55.78	44.22
Management Reports	45	46	51	9.47	6.32	42.11	57.90	42.10

[6] Ibid.

The most utilized reporting medium for sustainability reporting is the annual report (94.74% of respondents reported on one, two or three areas of sustainability) which concurs with respondents' perceptions of the most important reporting medium previously reported in Table 6.18. Interestingly, the annual report was also utilized the most to report on all three components of sustainability (58.95%) which again concurs with respondents' perceptions from Table 6.19.

Other frequently utilized reporting media include the corporate/strategic report (71.58%) and the web-site (69.47%). Of web-site respondents, fifty used the web-site to report from an integrated reporting viewpoint (52.63%). In comparing this to perceived importance of reporting medium from Table 6.19, no significant differences were found between integrated and non-integrated reporters. However, in practice it appears to be utilized at higher levels by integrated reporters.

The stand-alone sustainability report is one of the least used reports for sustainability reporting with 56.84% of respondents indicating that they do not report sustainability information using a stand-alone report. A total of 22.11% of reporting respondents indicated that they used stand-alone reports to report from an integrated viewpoint of sustainability whilst 13.68% reported on one area and 7.37% reported on two areas, providing a total of 43.16% (forty-one respondents). This result agrees with the results provided in Table 6.17, where 41% of respondents had considered stand-alone sustainability reports as an important to very important medium in reporting such information.

Other minor utilized reporting media included SoE reports (60.01%), key performance indicator reports (62.11%) and staff training manuals (63.16%). A possible explanation for the low reporting rate in these reports is that these reports may simply not be produced by all local government authorities. This would be particularly relevant for SoE reports – SoE reports are mandatory only in one State of Australia (NSW), therefore, local authorities in other States may simply not produce these reports.

To determine if there were any significant differences in type of reporting medium being utilized by the type of reporter (whether integrated reporting across all three components

or not), independent group t-testing was conducted. The findings in Table 6.22 indicate that the type of reporter may help to determine what reporting media will be utilized in reporting sustainability information. Results indicate that there are significant differences in the usage of seven different media types for sustainability reporting purposes between integrated and non-integrated reporters – that is, integrated reporters utilize these forms of media more than non-integrated reporters. The media are stand-alone sustainability reports ($t=2.119$, $p<.05$), annual reports ($t=2.495$, $p<.05$), SoE reports ($t=3.963$, $p<.001$), budget statements ($t=2.523$, $p<.05$), key performance indicator reports ($t=2.757$, $p<.01$), the web-site ($t=3.446$, $p<.01$) and management reports ($t=3.017$, $p<.01$).

Table 6.22
Independent Groups T-test
Mail Survey - Comparing Type of Reporting to Type of Reporters: Test Statistics

Type of Reports	t-test	df	Significance (2-tailed)	Mean Diff	Std. Error Difference
Stand-alone Sustainability report	2.119	93	.037	.228	.108
Annual Report	2.495	93	.014	.142	.057
Corporate/Strategic Report	.863	93	.391	.087	.101
Operational Plans	1.215	93	.228	.130	-.107
SoE Reports	3.963	93	.000	.408	.103
Community Reports	1.775	93	.079	.196	.111
Budget Statements	2.523	93	.013	.272	.108
Key Performance Indicator Reports	2.757	93	.007	.293	.107
Council Minutes	1.065	93	.290	.115	.108
Web-Site	3.446	93	.001	.340	.099
Staff Training Manuals	1.710	93	.091	.183	.107
Policy Documents	2.214	93	.029	.242	.109
Management Reports	3.017	93	.003	.318	.105

These results provide some differences in comparison to Table 6.19, which showed that integrated reporters considered the annual report, SoE reports and community reports more important than non-integrated reporters. These results, whilst highlighting that integrated reporters are utilizing the annual report and SoE report more than non-integrated reporters, highlighted no significant differences in the usage of community reports between reporters.

The local authorities that did report on voluntary sustainability information were asked if there was a particular focus of sustainability reporting for their organization.

6.4.7 Focus of Sustainability Reporting

Asking respondents if they focused on certain components of sustainability reporting would help to determine if local authorities focused on any one component of sustainability reporting or from an integrated viewpoint of sustainability. Previous research has indicated that local government authorities tend to be focused on one component of sustainability reporting, namely, environmental reporting rather an integrated reporting approach (GRI 2004; ICLEI 2001; Lewis 2000; Whittaker 1996).

Survey respondents were asked to consider four approaches and determine the importance of each approach to their organization (using a five-point scaled response from very unimportant to very important). The approaches were a focus on environmental reporting, a focus on social reporting, a focus on economic reporting and an integrated reporting approach focusing on environmental, social and economic reasons with descriptive results provided in Table 6.23.

Table 6.23
Mail Survey – Reporting Focus: Descriptive Statistics

Focus	Number	Minimum	Maximum	Mean	Std. Deviation
Environmental	88	1	5	3.97	.877
Social	87	2	5	4.06	.826
Economic	87	2	5	4.18	.740
Integrated	86	1	5	3.94	.912

Respondents indicated that the traditional economic focus was considered slightly more important than the other approaches to sustainability reporting. This focus provided a mean score of 4.18 with social reporting of next importance recording a mean score of 4.06. Environmental reporting provided a mean score of 3.97 with an integrated viewpoint of sustainability being viewed the least important of the four approaches (mean score of 3.94).

These results are mixed when compared against the type of sustainability reporting that respondents engage in as previously provided in Table 6.9. Results indicated (from Table 6.9) that the highest level of reporting was social reporting (90.53%) with the integrated reporting approach being reported on by 69.47% of respondents. It appears perhaps that whilst respondents may be engaging in more social reporting than other approaches, more respondents still consider that the economic approach is the most important focus of their organization with social and environmental reporting a slightly lesser focus.

Respondents were asked to explain why they considered the approach to sustainability reporting they had indicated as most important to their organization in comparison to the other approaches. Of the ninety-five respondents, thirty-six did not provide an answer to this question, leaving a total of fifty-nine responses. Reasons put forward highlighted the importance that local government authorities place on reporting from an integrated reporting focus (38.98%), the importance of reporting on the current economic climate conditions (16.95%) and the importance of engaging and informing the community through reporting (16.95%).

A number of local authorities did not report any voluntary sustainability information and indicated why they did not.

6.4.8 Why do Organizations Not Report any Voluntary Sustainability Information?

As shown previously in Table 6.9, of the 190 respondents, ninety-five indicated that their local authority does not report any voluntary sustainability information. These authorities were asked to provide a reason why they do not report any sustainability information. Of the ninety-five respondents, thirty-two did not provide an answer to this question. This left a total of sixty-three respondents that did not report any sustainability information that had responded to the question. A number of authorities provided multiple reasons, providing a total of eighty-seven responses to this question.

From these sixty-three respondents, the most commonly cited reason was insufficient resources (42.5%) including insufficient time, funding, data and/or manpower. This concurs with Sciulli (2009) who, whilst focusing on sustainability reporting from a GRI

perspective, considered that council officers require increased resources in order to report adequately on sustainability. Other commonly cited reasons included: currently there is no mandated requirement for such reporting (27.6%); the organization was planning to commence reporting in the near future (8%); the reporting was not seen as a priority (6.90%); the reporting was not requested by the community (5.70%); and the organization had no expertise in this area of reporting and/or there were no systems in place to report such information (each 4.60%).

Mail survey respondents were asked to consider the likelihood of future sustainability reporting within their organization.

6.4.9 Future Sustainability Reporting

All mail survey respondents were asked to indicate the likelihood that their organization would either continue to or begin to report voluntary sustainability information to their stakeholders in the future (using a five-point scaled response from not at all likely to extremely likely). The results are provided in Table 6.24, split by if authorities were currently reporting on sustainability or not and the total for all responses. In examining the results, 82.11% of current sustainability reporters are likely to extremely likely to report on sustainability in the future. Whilst for non-reporters of sustainability, 37.89% indicated that in the future they would be likely to extremely likely to report on sustainability. These are very encouraging results indicating that thirty-six local authorities will possibly commence reporting on sustainability in the future.

Table 6.24
Mail Survey – Sustainability Reporting in the Future[7]

Sustainability Reporting	Did Not Respond %	Not at all Likely %	Unlikely %	Neutral %	Likely %	Extremely Likely %
Yes	1.05	1.05	2.11	13.68	46.32	35.79
No	-	7.37	27.37	27.37	26.32	11.58
Total	.53	4.21	14.74	20.52	36.32	23.68

To determine if these differences between the reporters and non-reporters were significant, independent group t-testing was conducted. The results indicate that the differences between the two groups are significant at the .001 level, as shown in Table 6.25.

Table 6.25
Independent Group T-Test
Mail Survey – Type of Sustainability Information: Test Statistics

	Measurement Method	
Equal variances Assumed	t-test df Asymp. Sig. (2 sided)	6.869 188 .000
Equal variances Not Assumed	t-test df Asymp. Sig. (2 sided)	6.869 179.609 .000

Those authorities that had indicated that they plan to report voluntary sustainability information in the future were asked to indicate for each type of voluntary information (environmental, social, economic or reporting from an integrated reporting viewpoint)

[7] Ibid.

whether the information would be restricted, similar or expanded in comparison to previous years (Table 6.26).

Table 6.26
Mail Survey – Reporting Focus by Type of Reporting[8]

Type of Sustainability Reporting	Reporting on Sustainability	No Response %	Restricted %	Similar %	Expanded %
Environmental	Yes	1.28	2.56	37.18	58.97
	No	13.89	-	-	86.11
Social	Yes	5.13	2.56	42.31	50
	No	13.89	-	-	86.11
Economic	Yes	3.85	2.56	43.59	50
	No	22.22	-	-	77.78
Integrated	Yes	24.36	2.56	30.77	42.31
	No	25	-	-	75

Of the current reporters on sustainability, of the seventy-eight respondents that had indicated they were likely to extremely likely to report voluntary sustainability information again in the future (Table 6.24), the area most likely to expand in the future was found to be environmental reporting with forty-six authorities (58.97%) considering that their environmental sustainability information would be expanded. Both social and economic information was likely to be expanded by 50% of authorities with integrated reporting the least favoured reporting approach for expansion (42.31%).

Of the non-reporters, local authorities would most likely commence sustainability reporting in the areas of environmental and/or social reporting (86.11%). The area next most likely was economic reporting (77.78%) with the least most likely area of the four

[8] Ibid.

reporting types being the integrated approach (75.00%). This planned integrated reporting approach up-take is similar to that previously found in current sustainability reporting for local government in Table 6.9, being 69.47%. It appears non-reporters may take up integrated reporting in the future at similar levels as current reporters of sustainability in local government.

In summary, it appears that local governments in Australia do report on sustainability. The mail survey results indicate that 50% of respondents do report on at least one, two or three components of sustainability with a further 37.90% of non-reporters considering that it is likely to extremely likely that they will report on sustainability information in the future.

6.5 Differences in the Level of Sustainability Reporting in Urban and Rural Local Government Authorities

The second research question sought to examine and determine if there are differences between the levels of urban and rural local government sustainability reporting in Australia. Whilst there are no known studies that have investigated rural sustainability reporting and the differences between urban and rural sustainability reporting, based on an examination of LA21 studies (Pini *et al.* 2007; Bajracharya and Khan 2004; Kupke 1996) it was expected that there will be differences in the levels of reporting.

6.5.1 Introduction

Respondents were categorized into their ACLG classification and then further categorized into whether they report or do not report sustainability information with results provided in Table 6.27. Of the 190 respondents, eighty-nine responses were received from authorities in the urban classification whilst 101 responses were received from rural authorities. Of the urban responses, 66.29% reported voluntary sustainability information whilst only 35.64% of the rural councils reported.

Table 6.27
Mail Survey – Reporting on Sustainability by ACLG Classification

ACLG Classification	Yes - Report	No - Report	Total	% Yes- Report	% No - Report
Urban	59	30	89	66.29	33.71
Rural	36	65	101	35.64	64.36
Total	95	95	190		

An independent group t-test was conducted to determine if there was a significant difference between urban and rural authorities as to whether they did or did not report on sustainability. The results are significant at the 0.001 level as shown in Table 6.28. It would therefore appear that there is a significant difference between sustainability reporting in urban and rural local authorities in Australia.

Table 6.28
Independent Groups T-Test
Mail Survey – Reporting on Sustainability: Test Statistics

	Measurement Method	
Equal variances Assumed	t-test df Asymp. Sig. (2 sided)	4.405 188 .000
Equal variances Not Assumed	t-test df Asymp. Sig. (2 sided)	4.409 185.553 .000

Responses were further broken down into the seven ACLG classifications as shown in Table 6.29. The highest response rates received from urban local authorities were from the metropolitan developed and regional town/city categories (both providing 40 responses). Of the metropolitan developed authorities, 75% were reporting voluntary sustainability information whilst 55% of regional town/city authorities were reporting sustainability information. A further point of interest is the fringe classification. Whilst only seven responses were received from this classification, 71.43% of these responses indicated that they were reporting sustainability information.

Table 6.29
Mail Survey – Reporting on Sustainability by ACLG Sub-Classification

Classification	ACLG Classification	Yes - Report	No - Report	Total	% Yes-Report	% No - Report
Urban						
	Capital City	2	-	2	100	-
	Metropolitan Developed	30	10	40	75	25
	Regional Town/City	22	18	40	55	45
	Fringe	5	2	7	71.43	28.57
	Total	**59**	**30**	**89**		
Rural						
	Significant Growth	1	4	5	20	80
	Agricultural	23	37	60	38.33	61.67
	Remote	12	24	36	33.33	66.67
	Total	**36**	**65**	**101**		

In a further detailed analysis of the urban category, it was found that there was variation between different sized authorities (as shown in Table 6.30). For example, for those respondents considered as being ‘very large’ metropolitan developed authorities (that is, with a population greater than 120,000 which equated to sixteen respondents), 93.75%

were reporting sustainability information. Whilst for 'small' metropolitan developed authorities (that is, a population of up to 30,000 which equated to four respondents), only 25% were reporting sustainability information. For regional town/city authorities, all 'very large' authorities (four respondents) were reporting on sustainability whilst for 'small' regional town/cities only 38.89% were reporting on sustainability (from a total of eighteen respondents).

Table 6.30
Mail Survey – Reporting on Sustainability by ACLG Urban Classifications

ACLG Classification	Population Size	Yes - Report	No - Report	Total	%Yes-Report	% No - Report
Metropolitan Developed						
Small	Up to 30,000	1	3	4	25	75
Medium	30,001 – 70,000	5	3	8	62.50	37.50
Large	70,001 – 120,000	9	3	12	75	25
Very large	More than 120,000	15	1	16	93.75	6.25
Regional Town/City						
Small	Up to 30,000	7	11	18	38.89	61.11
Medium	30,001 – 70,000	9	5	14	64.29	35.71
Large	70,001 – 120,000	2	2	4	50	50
Very large	More than 120,000	4	-	4	100	-
Fringe						
Small	Up to 30,000	1	-	1	100	-
Medium	30,001 – 70,000	1	2	3	33.33	66.67
Large	70,001 – 120,000	1	-	1	100	-
Very large	More than 120,000	2	-	2	100	-

These results can be contrasted with the rural responses. From Table 6.29, the highest response rate was from the agricultural classification (sixty responses received) with

38.33% indicating that they reported sustainability information. Similar results are found in the two other classifications, with 33.33% and 20% of remote and significant growth classifications, respectively, indicating that they report on sustainability information.

Rural results were further analyzed into different sized authorities within rural categories, as shown in Table 6.31. In referring to Table 6.31, no such detail is provided for the 'significant growth' classification as it does not have any further categories based on size whilst for the 'remote' classification, detail was not available from the mail survey to separate it further into its four separate categories (being extra small, small, medium and large). Therefore, based on what information was available, the classification was separated into two categories – 'large' (population size of 3,001 – 20,000) category and 'all 'others (that is, less than 3,000).

From analyses of the results, no major variation in reporting of sustainability information was found in the different agricultural categories with 'large' authorities (population size 5,001 – 10,000) recording the highest reporting percentage, being 45.45%. Whilst for the remote classification, there was variation found between categories with 71.43% of 'large' authorities reporting on sustainability in comparison to only 24.14% of the 'other' category. However, with variation in the number of responses in each category, (a total of seven respondents in the 'very large' category and twenty-nine in the 'other' category) these results need to be treated with caution and further testing to test the validity of these results is recommended.

Table 6.31
Mail Survey – Reporting on Sustainability by ACLG Rural Classifications

ACLG Classification	Population Size	Yes - Report	No - Report	Total	%Yes-Report	% No - Report
Agricultural						
Small	Up to 2,000	7	7	14	33.33	66.67
Medium	2,001 – 5,000	6	11	17	39.29	60.71
Large	5,001 – 10,000	2	10	12	45.45	54.55
Very large	10,001 – 20,000	8	9	17	34.62	65.38
Remote						
Others	Up to 3,000	7	22	29	24.14	75.86
Large	3,001-20,000	5	2	7	71.43	28.57

6.5.2 Type of Sustainability Reporting

To determine if there was a particular focus of reporting that was more prevalent in urban and/or rural classifications, the type of voluntary sustainability information being reported was examined. Results are provided in Table 6.32 with percentages provided as number of reporters in each classification (from Table 6.27). By categorizing in this manner, it shows urban authorities report more social information and environmental information (94.92% and 93.22% of all urban reporters) whilst rural authorities report more social and economic information (83.33% and 77.78% of all rural respondents) in comparison to other reporting approaches.

Table 6.32
Mail Survey – Type of Sustainability Information

Classification	Environmental	Social	Economic	Integrated
Urban				
Number Urban Reporters	55	56	52	48
% Urban Reporters	93.22%	94.92%	88.14%	81.36%
Rural				
Number Rural Reporters	23	30	28	18
% Rural Reporters	63.89%	83.33%	77.78%	50%

One interesting finding was the low number of rural respondents that reported from an integrated reporting approach (50% of rural respondents) – that is, of the 101 rural respondents, thirty-six report voluntary sustainability information with only 50% of these respondents reporting from an integrated viewpoint.

This is contrasted with the urban reporters – of the eighty-nine urban respondents, fifty-nine report sustainability information, with 81.36% reporting from an integrated viewpoint. Independent group t-testing was conducted to determine if there was a significant difference between urban and rural authorities and the type of sustainability reporting being produced. The results are significant at the 0.001 level for each type of reporting, as shown in Table 6.33.

Table 6.33
Independent Groups T-Test
Mail Survey – Type of Sustainability Information: Test Statistics

Type of Reporting	Measurement Method	
Environmental	t-test	5.911
	df	188
	Asymp. Sig. (2 sided)	.000
Social	t-test	4.843
	df	188
	Asymp. Sig. (2 sided)	.000
Economic	t-test	4.476
	df	188
	Asymp. Sig. (2 sided)	.000
Integrated	t-test	5.606
	df	188
	Asymp. Sig. (2 sided)	.000

To determine if there were any preferences for particular types of sustainability reporting between urban and rural authorities, data were further analyzed by ACLG classification (Table 6.34). Included within Table 6.34 was also the number of reporters for each type of reporting shown as a percentage of the number of reporters in each ACLG classification (as previously detailed in Table 6.29). By doing so, this provided a percentage of respondents that were reporting on each type of sustainability information by classification.

Table 6.34
Mail Survey – Sustainability Information by Classification

ACLG Classification	Environmental	% of Reporters	Social	% of Reporters	Economic	% of Reporters	Integrated	% of Reporters
Urban								
Capital City	2	100	2	100	2	100	2	100
Metropolitan Developed	29	96.67	27	90	28	93.33	26	86.67
Regional Town/City	19	86.36	22	100	18	81.81	16	72.72
Fringe	5	100	5	100	4	80	4	80
Sub-Total	55		56		52		48	
Rural								
Significant Growth	1	100	1	100	1	100	1	100
Agricultural	14	60.87	19	82.61	17	73.91	10	43.48
Remote	8	66.67	10	83.33	10	83.33	7	58.33
Sub-Total	23		30		28		18	
Total	78		86		90		66	

From an urban perspective, of interest was the variation in the 'regional town/city' reporters. Fewer reporters reported on environmental (86.36%), economic (81.81%) and from an integrated perspective (72.72%) whilst more focused on social reporting (100%). Further, 'fringe' reporters appear to favour environmental and social reporting (100% each) over economic and integrated reporting (80% each). However, with the low number of respondents in the 'fringe' classification (five), the results need to be treated with caution.

From a rural perspective, there was diversity in responses in the 'agricultural' and 'remote' classifications. For example, in the 'agricultural' classification, twenty-three respondents had previously indicated in Table 6.29 that they reported sustainability information. Of that number, the lowest reported type of information was environmental information (60.87%) with only ten authorities (43.48%) reporting from an integrated viewpoint of sustainability. Similar results were found in the 'remote' classification – twelve respondents had previously indicated (Table 6.29) that they reported on sustainability – eight local authorities (66.67%) reported environmental information whilst only seven (58.33%) reported from an integrated viewpoint. It appears that local authority respondents in the 'agricultural' and 'remote' classifications may concentrate more on social and economic reporting with less emphasis on environmental reporting and integrated reporting.

6.5.3 Size of Authority

In an effort to determine what makes urban and rural local authorities report on sustainability, results were further examined by total revenue and whether respondents reported on sustainability or not (Table 6.35). Perhaps differences in reporting could be explained by examining the size of the organization – that is, the larger the organization, the more resources are available to report on sustainability. This was concluded to be the case by Bajracharya and Khan (2004). They found that councils with greater resource bases were more likely to engage in sustainability initiatives whilst councils with smaller resource bases were less likely to engage in sustainability initiatives. This was supported by Pini (2009) who concluded that one of the most critical constraints to local

government in environmental management initiatives is lack of resources.

In an analysis of the results (Table 6.35), it appears that size may be a factor in determining if local authorities report on sustainability – with 88.46% and 74.19% of authorities with revenue greater than $100M and revenue between $50,000,001 - $100,000,000, respectively, reporting on sustainability. The percentage of authorities then reduced to 45.10% for those with total revenue between $20,000,001 - $50,000,000 with progressive reductions to only 9.52% of authorities reporting information in the $5,000,000 - $10,000,000 category.

Table 6.35
Mail Survey – Reporting on Sustainability by Total Revenue[9]

Total Revenue	Yes % (1)	No % (2)	Total % (3)	Envir. (4)	Social (5)	Economic (6)	Integrated (7)
Greater than $100M	88.46	11.54	100	22	20	18	17
$50,000,001 - $100,000,000	74.19	25.81	100	21	23	19	19
$20,000,001 - $50,000,000	45.10	54.90	100	20	21	20	16
$10,000,001 - $20,000,000	39.47	60.53	100	10	13	14	9
$5,000,000 - $10,000,000	39.13	60.87	100	4	8	7	4
Less than $5,000,000	9.52	90.48	100	1	1	2	1
Total	100	100	100	78	86	80	66

Data were further analyzed into number of reporting authorities by type of reporting (environmental, social, economic and integrated) and their revenue banding with results provided in Table 6.35 (Columns 4-7). Results indicate authorities in the higher revenue banding are reporting at higher levels across all four types of reporting than authorities at lower revenue levels.

Statistical testing was conducted to determine if these reporting differences were

[9] Ibid.

considered significant utilizing a one-way analysis of variance (ANOVA) test. As provided in Table 6.36, these differences are significant at the .001 level for each of the four types of reporting, indicating that revenue base is a factor in determining if local authorities report on sustainability.

Table 6.36
Mail Survey – Reporting on Sustainability by Total Revenue: Test Statistics

Type of Reporting	df	F	Significance
Environmental Between Groups Within Groups Total	 5 184 189	13052	.000
Social Between Groups Within Groups Total	 5 184 189	9.240	.000
Economic Between Groups Within Groups Total	 5 184 189	5.210	.000
Integrated Between Groups Within Groups Total	 5 184 189	8.047	.000

In an effort to isolate exactly where these significant differences were located, further post hoc analysis utilizing Tukey HSD testing was conducted. Table 6.37 provides the mean differences and significance levels for each type of sustainability reporting across each revenue band. Significant differences in levels of reporting were found for environmental, social and integrated reporters in the 'less than $5,000,000' and '$5,000,000 - $10,000,000' revenue bands in comparison to all other revenue bands. Also, for environmental and social reporters, significant differences were found in the revenue bands '$10,000,001 - $20,000,000' and 'greater than $100M'. Whilst for economic reporters, significant reporting differences were found between reporters in the revenue bands 'less than $5,000,000' and '$5,000,000 -$10,000,000' and the 'greater than $100M' revenue band with further differences found between the 'less than $5,000,000' and '$50,000,001 - $100,000,000' banding. These results are further confirmed by examining Table 6.35 (Columns 4-7).

Table 6.37
Tukey HSD Tests
Mail Survey - Comparing Reporting Type to Revenue Banding

		Environmental	Social	Economic	Integrated
	Revenue Banding	Mean Difference/ Significance Level	Mean Difference/ Significance Level	Mean Difference/ Significance Level	Mean Difference/ Significance Level
Greater than $100M	Greater than $100M				
	$50,000,001 - $100,000,000	.126/.926	.300/.243	.209/.680	.126/.931
	$20,000,001 - $50,000,000	.216/.439	.294/.163	.273/.272	.189/.608
	$10,000,001 - $20,000,000	.345/.027	.364/.026	.297/.149	.266/.183
	$5,000,000 - $10,000,000	-630/.000	.694/.000	.518/.002	.565/.000
	Less than $5,000,000	.799/.000	.722/.000	.597/.000	.606/.000
$50,000,001 - $100,000,000	Greater than $100M	-.126/.926	-.300/.243	-.209/.680	-.126/.931
	$50,000,001 - $100,000,000				
	$20,000,001 - $50,000,000	.089/.970	-.006/1.000	.064/.995	.063/.994
	$10,000,001 - $20,000,000	.218/.333	.064/.993	.088/.976	.140/.801
	$5,000,000 - $10,000,000	.504/.000	.394/.022	.309/.166	.439/.005
	Less than $5,000,000	.672/.000	.421/.017	.388/.049	.480/.002
$20,000,001 - $50,000,000	Greater than $100M	-.216/.439	-.294/.163	-.273/.272	-.189/.608
	$50,000,001 - $100,000,000	-.089/.970	.006/1.000	-.064/.995	-.063/.994
	$20,000,001 - $50,000,000				
	$10,000,001 - $20,000,000	.129/.726	.070/.979	.024/1.000	.077/.964
	$5,000,000 - $10,000,000	.414/.001	.400/.004	.244/.266	.376/.007
	Less than $5,000,000	.583/000	.427/.004	.324/.078	.417/.003
$10,000,001 - $20,000,000	Greater than $100M	-.345/.027	-.364/.026	-.297/.149	-.266/.183
	$50,000,001 - $100,000,000	-.218/.333	-.064/.993	-.088/.976	-.140/.801
	$20,000,001 - $50,000,000	-.129/.726	-.070/.979	-.024/1.000	-.077/.964
	$10,000,001 - $20,000,000				
	$5,000,000 - $10,000,000	.285/.045	.330/.019	.221/.311	.299/.036
	Less than $5,000,000	.454/.000	.357/.015	.079/.988	.340/.019
$5,000,000 - $10,000,000	Greater than $100M	-.630/.000	-.694/.000	-.518/.002	-.565/.000
	$50,000,001 - $100,000,000	-.504/.000	-.394/.022	-.309/.166	-.439/.005
	$20,000,001 - $50,000,000	-.414/.001	-.400/.004	-.244/.266	-.376/.007
	$10,000,001 - $20,000,000	-.285/.045	-.330/.019	-.221/.311	-.299/.036
	$5,000,000 - $10,000,000				
	Less than $5,000,000	-.169/.679	.027/1.000	-.079/.988	.041/.999
Less than $5,000,000	Greater than $100M	-.799/.000	-.722/.000	-.597/.000	-.606/.000
	$50,000,001 - $100,000,000	-.672/.000	-.421/.017	-.388/.049	-.480/.002
	$20,000,001 - $50,000,000	-.583/.000	-.427/.004	-.324/.078	-.417/.003
	$10,000,001 - $20,000,000	-.454/.000	-.357/.015	-.300/.090	-.340/.019
	$5,000,000 - $10,000,000	-.169/.679	-.027/1.000	-.079/.988	-.041/.999
	Less than $5,000,000				

To determine the level of importance of sustainability reporting, respondents were asked a number of questions.

6.5.4 Importance of Sustainability Reporting

Local authorities were asked to indicate what the level of importance reporting on sustainability was, in view of their organization's priorities and commitments (five-point interval scale from very unimportant to very important). Results were analyzed from an urban and rural perspective.

Overall, 88.14% of urban respondents and 69.44% of rural respondents (Table 6.38) indicated that they considered reporting on sustainability important to very important with urban respondents recording a higher mean score of 4.15 (range from 1 to 5) in comparison to rural respondents of 3.69.

Table 6.38
Mail Survey - Importance of Reporting on Sustainability[10]

Classification	Mean Score	Did Not Respond %	Very Unimportant %	Unimportant %	Neutral %	Important %	Very Important %
Urban	4.15	-	1.69	3.39	6.78	50.85	37.29
Rural	3.69	5.56	2.78	-	22.20	44.44	25
Total	4.10	2.11	2.11	2.11	12.63	48.42	32.63

An independent group t-test was conducted to determine if there were significant differences between urban and rural classifications as to the importance of sustainability reporting to their organization. The results are not significant at the 0.05 level as shown in Table 6.39. It would therefore appear that there is no significant difference between the perceived level of importance of sustainability reporting in urban and rural local authorities in Australia.

[10] Ibid.

Table 6.39
Independent Groups T-Test
Mail Survey - Importance of Reporting on Sustainability: Test Statistics

Measurement Method	
t-test	1.329
df	91
Asymp. Sig. (2 sided)	.187

Local authorities were asked if there were any particular issues restricting the up-take of sustainability reporting.

6.5.5 Restrictions on Sustainability Reporting

Respondents were asked to indicate the importance of eleven reasons in restricting or preventing sustainability reporting in their organization (interval scale from very insignificant to very significant) with results provided in Table 6.40. In a review of the results, the most significant to very significant reasons considered to restrict sustainability reporting were found to be data inadequacy (66.32%) and lack of funding (54.74%).

Table 6.40
Mail Survey - Reasons in Restricting/Preventing Sustainability Reporting[11]

Reasons	Did Not Respond %	Very Insignificant %	Insignificant %	Neutral %	Significant %	Very Significant %
Lack of Inter-Departmental Cooperation	13.68	7.37	11.58	33.68	32.63	1.05
Lack of Expertise and Knowledge	9.47	6.32	10.53	26.32	42.11	5.26
Lack of Funding	11.58	6.32	6.32	21.05	38.95	15.79
Data Inadequacy	7.37	4.21	7.37	14.74	50.53	15.79
Lack of Infrastructure	12.63	6.32	13.68	34.74	30.53	2.11
Lack of Community Interest	11.58	5.26	15.79	40	25.26	2.11
Lack of Support from Senior Management	10.53	10.53	24.21	32.63	21.05	1.05
Lack of Support from Councilors	11.58	7.37	26.32	36.84	15.79	2.11
Not addressed in the strategic plan	15.79	11.58	21.05	38.95	11.58	1.05
More important Financial Allocations	11.58	6.32	10.53	24.21	35.79	11.58
More important day-to-day issues	10.53	5.26	7.37	27.37	33.68	15.79

To determine if these differences were significant in preventing sustainability reporting, a one-sample t-test was conducted on each of the reasons. As can be seen, in Table 6.41, eight reasons were found to be significant.

[11] Ibid.

Table 6.41
T-Test
Mail Survey - Reasons Restricting Sustainability Reporting: Test Statistics

Reason	Mean	Std. Deviation	Number	t-test	df	Sig. (2 tailed)
Lack of Inter-Departmental Cooperation	3.10	.951	82	.929	81	.356
Lack of Expertise and Knowledge	3.33	.999	86	3.021	85	.003
Lack of Funding	3.58	1.089	84	4.910	83	.000
Data Inadequacy	3.72	.994	88	6.759	87	.000
Lack of Infrastructure	3.10	.945	83	.929	82	.356
Lack of Community Interest	3.04	.898	84	.365	83	.716
Lack of Support from Senior Management	2.75	.987	85	-2.308	84	.023
Lack of Support from Councilors	2.76	.926	84	-2.355	83	.021
Not addressed in the strategic plan	2.64	.931	80	-3.482	79	.001
More important Financial Allocations	3.40	1.088	84	3.410	83	.001
More important day-to-day issues	3.53	1.064	85	4.585	84	.000

The most significant reasons were lack of expertise and knowledge ($t=3.021$, $p<.01$), lack of funding ($t=4.910$, $p<.001$), data inadequacy ($t=6.759$, $p<.001$), sustainability reporting not addressed in the strategic/corporate plan ($t=-3.482$, $p<.01$), more important financial allocations ($t=3.410$, $p<.01$) and more important day-to-day issues to deal with ($t=4.585$, $p<.001$). Reasons not considered significant were lack of inter-departmental funding, lack of infrastructure and lack of community interest.

Further testing was conducted to determine if there were any differences in response by classification type (urban or rural) using independent group t-testing, as shown in Table 6.42.

Table 6.42
Independent Groups T-Test
Mail Survey - Comparing Classification of Authorities to What Restricts Sustainability Reporting: Test Statistics

Reasons	t	df	Sig. (2 tailed)
Lack of Inter-Departmental Cooperation	-.582	80	.562
Lack of Expertise and Knowledge	-2.379	84	.020
Lack of Funding	-2.951	82	.004
Data Inadequacy	-1.024	86	.309
Lack of Infrastructure	-2.845	81	.006
Lack of Community Interest	-1.780	82	.079
Lack of Support from Senior Management	-.732	83	.466
Lack of Support from Councillors	-.967	82	.336
Not addressed in the strategic plan	-.877	78	.383
More important financial allocations	-1.017	82	.312
More important day today issues	-1.092	83	.278

From examining the results, it appears that the classification of local authority (whether it be urban or rural) may help to explain what restricts or prevents sustainability reporting. Significant positive relationships were found between classification of local authorities and reasons 2, 3 and 5 – being a lack of expertise and knowledge ($t=.251$, $p<.05$), a lack of funding ($t=.310$, $p<.01$) and a lack of infrastructure ($t=.301$, $p<.01$) with reason 2, a lack of funding being the most significant. This finding concurs with the study conducted by Pricewaterhouse Coopers (2007) who found that rural and remote authorities have much more pronounced financial problems in comparison to metropolitan and urban fringe councils.

On further analysis (Table 6.43) rural authorities for each of these three reasons recorded a higher mean score in comparison to urban authorities, meaning that rural authorities considered these reasons more important than urban authorities in explaining what restricts or prevents sustainability reporting in their organization.

Table 6.43
Mail Survey - Reasons Restricting Sustainability Reporting: Descriptive Statistics

Reason	Classification	Number	Mean	Std. Deviation	Std. Error Mean
Lack of Expertise and Knowledge	Urban	56	3.14	1.034	.138
	Rural	30	3.67	.844	.154
Lack of Funding	Urban	54	3.33	1.133	.154
	Rural	30	4.03	.850	.155
Lack of Infrastructure	Urban	54	2.89	.945	.129
	Rural	29	3.48	.829	.154

6.6 Key Factors Leading to the Adoption of Sustainability Reporting in Local Government Authorities

The third research question sought to examine the key reasons leading to the adoption of sustainability reporting within local government authorities. Based on prior research, it was expected that there would be two primary reasons driving the establishment of sustainability reporting in Australia: key leadership support from within the organization (Farneti and Guthrie 2009; Herbohn and Griffiths 2008; Hughey and Coleman 2007; Marcuccio and Steccolini 2005; Jigsaw Services 2004; Ministry for the Environment 2002; Vandenberg 2002); and a need to inform external stakeholders (Farneti and Guthrie 2009; Dickinson *et al.* 2005; Jigsaw Services 2004; Vandenberg 2002).

6.6.1 Importance of Key Leadership Support

Respondents were asked to indicate the importance of key leadership support in the establishment of voluntary sustainability reporting practices within their organization (using a five-point scaled response from very unimportant to very important) as provided in Table 6.44. Overall, 89.47% of respondents considered that key leadership support is important to very important, split between 94.92% of urban respondents and 80.56% of rural respondents.

Table 6.44
Mail Survey - Importance of Key Leadership Support[12]

Classification	Did Not Respond %	Very Unimportant %	Unimportant %	Neutral %	Important %	Very Important %
Urban	-	-	1.69	3.39	38.98	55.93
Rural	5.56	5.56	-	8.33	36.11	44.44
Total	2.11	2.11	1.05	5.26	37.89	51.58

To determine if these results were significant, a one-sample t-test was conducted on the overall results (Table 6.45). These results are significant at the .001 level indicating that key leadership support is considered important in the establishment of sustainability reporting.

Table 6.45
T-Test
Mail Survey – Key Leadership Support: Test Statistics

Mean	Std. Deviation	Number	t-test	df	Sig. (2 tailed)	Mean Difference
4.29	1.030	95	12.251	94	.000	1.295

Authorities were asked to indicate from which level of management they perceive key leadership support needs to originate (seven levels to choose from). Fifty-seven respondents indicated more than one level, with eight authorities indicating all seven levels. This provided a total of 246 responses (Table 6.46). Sixty-seven local authorities (27.24%) considered that the general manager/CEO was the position from which key leadership needs to originate.

The second most important position was found to be councillors (18.70% of responses) with government also considered important when viewed from a combined State and

[12] Ibid.

Commonwealth level - a combined 19.51% of respondents considered government, either at the State or Federal level, where key leadership support needs to originate.

Table 6.46
Mail Survey - Level Key Leadership Support Needs to Originate[13]

Level	Number (1)	% (2)	Environmental % (3)	Social % (4)	Economic % (5)	Integrated % (6)
Mayor	33	13.41	34.62	33.72	32.50	33.33
Councillors	46	18.70	48.72	47.67	42.50	42.42
General Manager/CEO	67	27.24	71.79	69.77	68.75	69.70
Departmental Heads	28	11.38	30.77	27.91	28.75	28.79
CFO	23	9.35	21.79	24.42	22.5	21.21
State Government	28	11.38	30.77	29.07	28.75	31.82
Federal Government	20	8.13	21.79	22.09	20.00	22.73
Other	1	.41	1.28	-	-	-
Total	246	100%				

By further examining management levels by type of reporting (environmental, social, economic and integrated reporting), analyses were undertaken to determine if there were any particular preferences for particular management levels determined by the type of reporting that respondent authorities were engaging in (Table 6.46 – Columns 3-6). Results were found to be quite consistent across each reporting type, with percentages shown as a percentage of actual number of respondents reporting on each reporting type (refer Table 6.9). One-way analysis of variance (ANOVA) testing was conducted to determine if there were any significant relationships between the type of reporting being

[13] Ibid.

conducted and the levels of key leadership support. Results were insignificant at the .05 level for each type of reporting (Table 6.47).

Table 6.47
One –way Analysis of Variance (ANOVA)
Mail Survey - Comparing Type of Reporting and Level of Key leadership

Type of Reporting	df	F	Sig.
Environmental Between Groups Within Groups Total	7 238 245	.271	.965
Social Between Groups Within Groups Total	7 238 245	1.342	.231
Economic Between Groups Within Groups Total	7 238 245	.743	.636
Integrated Between Groups Within Groups Total	7 238 245	.661	.705

6.6.2 Importance of Stakeholder Engagement

Using a five-point scaled response, local authorities were asked to indicate the importance of stakeholder engagement in the establishment of voluntary sustainability reporting, with results provided in Table 6.48. Overall, 81.05% of respondents considered that stakeholder engagement is important to very important, split between 79.66% of urban respondents and 83.33% of rural respondents.

Table 6.48
Mail Survey - Importance of Stakeholder Engagement[14]

Classification	Did Not Respond %	Very Unimportant %	Unimportant %	Neutral %	Important %	Very Important %
Urban	-	-	3.39	16.95	52.54	27.12
Rural	2.78	-	2.78	11.11	61.11	22.22
Significant Growth		-	-	-	*100*	-
Agricultural		-	-	*4.50*	*72.72*	*22.73*
Remote		-	*8.33*	*25*	*41.67*	*25*

To determine if these results were significant, a one-sample t-test was conducted on the overall results. These results are significant at the .001 level with 94 degrees of freedom as shown below in Table 6.49 indicating that respondents consider stakeholder engagement important in the establishment of sustainability reporting.

Table 6.49
T-Test
Mail Survey – Stakeholder Engagement: Test Statistics

Mean	Std. Deviation	Number	t-test	df	Sig. (2 tailed)	Mean Difference
4.00	.838	95	11.632	94	.000	1.000

These results are very interesting when contrasted to the findings of Pini and Haslam McKenzie (2006) who found that rural authorities placed limited emphasis on community engagement; whilst their research focused on only one component of sustainability, environmental sustainability, their results are in contrast to these results. Perhaps, though, particular rural classifications place more emphasis on this issue whilst others do not. In an effort to determine this, responses from rural authorities were further examined by ACLG classification (refer Table 6.47, rows 4-6). From examining the results, it appears

[14] Ibid.

that the 'agricultural' category may place higher importance on stakeholder engagement with twenty-one of the twenty-two responses (95.45%) considering it of high to very high importance in comparison to 'remote' category responses (66.67%)[15].

Authorities were asked to indicate which external stakeholders (from a group of six) they perceive are important to engage with in the establishment of sustainability reporting (using a five-point scaled response from very unimportant to very important) as shown in Table 6.50.

Table 6.50
Mail Survey - Importance of Stakeholder Groups[16]

Stakeholder Groups	Did Not Respond %	Very Unimportant %	Unimportant %	Neutral %	Important %	Very Important %
Residents	1.05	-	2.11	7.37	63.16	26.32
Taxpayers	17.89	3.16	9.47	25.26	31.58	12.63
Employers	15.79	-	3.16	21.05	47.37	12.63
Businesses	9.47	-	2.11	17.89	55.79	14.74
Community Interest Groups	3.16	-	2.11	8.42	65.26	21.05
Suppliers	22.11	1.05	6.32	34.74	32.63	3.16

The two important to very important stakeholder groups deemed by respondents were residents (89.47%) and community interest groups (86.32%). One-sample t-testing was conducted to determine if these results were significant. Both groups were considered significant at the .001 level with one other group, businesses, as provided in Table 6.51. The supplier's stakeholder group was found to be negatively significant. That is, this group was considered very unimportant to unimportant by respondents ($t=-2.231$, $p<.05$).

[15] The Significant Growth category was ignored for discussion purposes with only one response received from this category.
[16] Refer Appendix VIII for absolute numbers.

Table 6.51
T-Test
Mail Survey – Importance of Stakeholder Groups: Test Statistics

Stakeholder Groups	Mean	Std. Deviation	Number	t-test	df	Sig. (2 tailed)
Residents	4.11	.765	95	14.090	94	.000
Taxpayers	2.87	1.632	95	-.754	94	.453
Employers	3.22	1.552	95	1.388	94	.168
Businesses	3.55	1.319	95	4.045	94	.000
Community Interest Groups	3.96	.944	95	9.886	94	.000
Suppliers	2.64	1.564	95	-2.231	94	.028

6.6.3 Importance of the Two Reasons

It had been expected that local government sustainability reporting in Australia would be driven by two reasons - key leadership support from within the organization and to engage with external stakeholders. Results from the mail survey support these expectations. Results were further compared to determine if respondents considered one reason more important than the other in the establishment of sustainability reporting. Whilst both reasons indicated significant results (Table 6.45 and Table 6.49) it was established by examining Table 6.44 and Table 6.48 that a higher percentage of both urban and rural respondents considered key leadership a more important factor (55.90% and 44.60% of urban and rural respondents, respectively, considered key leadership very important) in comparison to stakeholder engagement (27.10% and 22.20% of urban and rural respondents, respectively, considered stakeholder engagement very important).

6.6.4 Other Important Reasons

Respondents were asked to indicate if there were any other reasons that they considered important in the establishment of sustainability reporting in local government. A small number of additional reasons was provided (twenty-one responses in total) by respondents with the two most commonly cited reasons being the need to provide consistency in reporting (19.05%) and the recognition of the value of such reporting (14.29%).

6.7 Summary

This chapter provided a descriptive analysis of the mail survey responses and the analysis in relation to the first three research questions posed for this research study. The next chapter provides the analysis for the fourth and fifth research questions.

Chapter 7 Data Analysis and Results: Mail Survey–Part II

7.1 Introduction

In this chapter results from the mail survey for research questions 4 and 5, focusing on the role of accountants within the sustainability reporting process and sustainability frameworks currently being used by local government bodies, are examined.

7.2 Accountant's Role within Sustainability Reporting in Local Government Authorities

Research question 4 sought to identify whether accountants were being utilized in sustainability reporting in local government in Australia. Based on prior studies (Farneti and Guthrie 2009; Herbohn and Griffiths 2008; Ball 2005, 2002; Dickinson *et al.* 2005; Telford 2005), it was expected that accountants would have a minimal level of involvement in the preparation of sustainability reports.

7.2.1 Introduction

Respondent local authorities were asked to indicate which department prepares the organization's external voluntary sustainability reporting information. Of the 95 respondents that prepared sustainability information the corporate planning department was responsible in 20% of cases followed by the environmental department in a further 17.90% (Table 7.1) of cases. While these results report the department that had primary responsibility for the preparation of the sustainability report, often input was provided by a number of departments. For example, thirty-six local authorities (37.90%) indicated that they used a sustainability reporting team consisting of two or more departments to prepare their organizations' sustainability information.

Table 7.1
Mail Survey – Preparation of Sustainability Information (By Department)

Department	Number	%	Number Sustainability Team	% Sustainability Team	Total	Total %
No response	3	3.16			3	2.31
Environmental Department	17	17.90	25	35.20	42	32.31
Finance Department	11	11.58	21	29.58	32	24.61
Strategic Planning Department	5	5.26	9	12.68	14	10.77
Corporate Planning Department	19	20	14	19.72	33	25.38
Outsourced	2	2.10	1	1.41	3	2.31
Other	2	2.10	1	1.41	3	2.31
Sustainability Reporting Team	36	37.90				
Total	95	100%	71	100%	130	100%

These data were then further analyzed to determine which departments were included in the sustainability reporting teams. Of the thirty-six authorities adopting a team approach, twenty indicated that there were two departments involved, nine indicated that there were three departments involved and one indicated that there were four departments involved in the preparation of sustainability information, providing a total of seventy-one responses. When these responses were separated across the different categories, it was found that the environmental department was the most involved in the preparation of sustainability information with forty-two respondents (32.31%) utilizing this department either in isolation or in combination with a team. The corporate planning department was utilized the next most with thirty-three respondents (25.38%) whilst the finance department was considered third most utilized with thirty-two respondents (24.62%).

Respondents were then asked if accountants were utilized in the preparation of the external sustainability information.

7.2.2 Utilization of Accountants

Results were quite evenly divided between those local authorities that do utilize accountants and those that do not. Of the ninety-five respondents that prepare voluntary sustainability information, forty-eight (50.53%) indicated that they do utilize accountants in the sustainability reporting process (Table 7.2). These results were further broken down into urban and rural categories to determine if there were any specific reporting trends. The results indicated that respondents from rural local authorities were more inclined to use accountants in the sustainability reporting process (58% compared to 46% for urban authorities). These results indicate that a higher proportion of rural authorities utilize accountants than urban authorities.

Table 7.2
Mail Survey – Utilization of Accountants

Use Accountants	Urban	Urban %	Rural	Rural %	Number	Total %
Yes	27	45.76	21	58.33	48	50.53
No	32	54.24	14	38.89	46	48.42
No response			1	2.78	1	1.05
Total	59	100%	36	100%	95	100%

The next stage was to identify the departments that used accountants (see Table 7.3). The finance department utilized accountants the most with 68.80% of finance department respondents using accountants in the preparation (or to assist as part of a sustainability reporting team) of the organization's sustainability reporting information. The corporate planning department also recorded similar levels of usage, with 63.60% utilizing accountants. Other departments that use accountants include the environmental department (45.20%) and the strategic planning department (42.90%).

Table 7.3
Mail Survey – Utilization of Accountants by Department

Department	Use Accountants	% Within Department	Do not Use Accountants	% Within Department	Total
No response					1
Environmental Department	19	45.20	23	54.80	42
Finance Department	22	68.80	10	31.2	32
Strategic Planning Department	6	42.90	8	57.1	14
Corporate Planning Department	21	63.60	12	36.4	33
Outsourced	3	100	-	-	3
Other	1	33.30	2	66.7	3
Total	72		57		130

The forty-eight authorities that used accountants were asked why they utilize accountants.

7.2.3 Why are Accountants used in the Sustainability Reporting Process?

Respondents were asked to indicate the importance of seven reasons (using a five-point scaled response from very unimportant to very important) in helping to determine why accountants are used in the sustainability reporting process (Table 7.4).

Table 7.4
Mail Survey – Why are Accountants Used in the Sustainability Reporting Process[1]

Why accountants are used	Did Not Respond %	Very Unimportant %	Unimportant %	Neutral %	Important %	Very Important %
Necessary Analytical Skills	6.12	-	-	8.16	71.43	14.29
Necessary Reporting Expertise	6.12	-	2.04	14.29	61.22	16.33
Necessary Planning & Development Skills	8.16	2.04	4.08	34.70	42.86	8.16
Assess Financial Viability	2.04	-	-	8.16	53.06	36.74
Manage the Budgetary Process	2.04	-	2.04	4.08	65.31	26.53
Extension of Financial Reporting	10.20	-	2.04	14.29	53.06	20.41
No-one Else Available	24.49	14.29	6.12	24.49	20.41	10.20

Respondents indicated that there was a number of reasons that they consider important to very important in explaining why accountants are used in the reporting process. The most important reasons were to manage the budgetary process (91.84%), to assess financial viability (89.80%) and accountants possess the necessary analytical skills (85.71%). To determine if these reasons were significant in determining why accountants are used, a one-sample t-test was conducted on each of the reasons. As can be seen in Table 7.5, all reasons with the exception of reason seven were found to be significant in determining why accountants are used in the sustainability reporting process.

[1] Refer Appendix VIII for absolute numbers.

Table 7.5
T-Test
Mail Survey - Why Accountants Are Used in the Sustainability Reporting Process: Test Statistics

Reason	Mean	Std. Deviation	Number	t-test	df	Sig. (2 tailed)
Necessary Analytical Skills	4.07	.490	46	14.744	45	.000
Necessary Reporting Expertise	3.98	.649	46	10.217	45	.000
Necessary Planning & Development Skills	3.56	.813	45	4.582	44	.000
Best placed to assess Financial Viability	4.29	.617	48	14.494	47	.000
Best placed to manage the Budgetary Process	4.19	.607	48	13.556	47	.000
Seen as an extension of Financial Reporting	4.02	.698	44	9.713	43	.000
No-one else available at the time	3.08	1.299	37	.380	36	.706

Reason seven considered using accountants because no-one else was available at the time. Only 30.61% of respondents considered this an important to very important reason why accountants are utilized. This result was not significant at the .05 level. Interestingly though, 25% of respondents did not provide any response to this reason.

Results were further analyzed to determine if the type of reporter (that is, integrated or non-integrated reporters) helped to explain why accountants were used by conducting an independent group t-test (Table 7.6).

Table 7.6
Independent Group T-Test
Mail Survey - Comparing Type of Reporter with Reasons Accountants are Used: Test Statistics

Reasons	t-test	df	Sig. (2 tailed)
Necessary Analytical Skills	-1.308	44	.198
Necessary Reporting Expertise	.808	44	.424
Necessary Planning & Development Skills	-.256	43	.799
Best placed to assess Financial Viability	1.204	46	.235
Best placed to manage the Budgetary Process	1.460	46	.151
Seen as an extension of Financial Reporting	2.077	42	.044
No-one else available at the time	-1.047	35	.302

One significant difference was found between the two types of reporter, being reason six, in that accountants are utilized in the sustainability reporting process as it is seen to be an extension of financial reporting. On further examination of this difference, it was found that integrated reporters considered this reason more important than non-integrated reporters in explaining why they use accountants in the sustainability reporting process. Perhaps authorities that report from an integrated approach view accountants in their more traditional role as financial accountants and, thus, consider sustainability reporting simply as an extension of financial reporting.

Local authorities were asked what role accountants had in the sustainability reporting process within their organization.

7.2.4 Role of Accountants in the Sustainability Reporting Process

Authorities were asked to indicate the role of the accountant from eight roles provided (using a five-point scaled response from not involved to very involved) in helping to determine the level of involvement the accountant has in the sustainability reporting process (Table 7.7).

Table 7.7
Mail Survey – Role of Accountants in the Sustainability Reporting Process[2]

Role of Accountants	Did Not Respond %	Not Involved %	Uninvolved %	Neutral %	Involved %	Very Involved %
Sustainability Report Preparer	6.12	8.16	6.12	16.33	53.06	10.21
Key Decision-Maker	8.16	8.16	4.08	32.66	34.69	12.25
Advisory Role	8.16	2.04	-	6.12	71.43	12.25
Bookkeeping Role	8.16	4.08	8.16	10.20	55.10	14.30
Monitoring Role	10.20	2.04	4.08	22.45	53.06	8.16
Assists in Financial Costings	8.16	-	-	2.04	61.23	28.57
Part of Reporting Team	14.29	4.08	2.04	34.69	34.70	10.20
Financial Information Provider	6.12	-	-	2.04	53.06	38.78

Respondents indicated that the most involved to very involved role that accountants undertook in their organization in the sustainability reporting process was that of financial information provider (91.84%) with the role of providing assistance in financial costing being the second most important (89.80%) and providing an advisory role (83.68%) being next most important. The least indicated roles of accountants were that of key-decision maker (46.94%) and being part of the sustainability reporting team (44.90%). It appears that perhaps accountants are still viewed in their traditional role as financial accountants in local authorities in Australia.

One positive finding was contrary to this viewpoint, though, as thirty-one respondents

[2] Ibid.

(63.27%) considered accountants as being involved to very involved in the role as preparer of the sustainability report in their organization. Perhaps there is a slow but gradual shift in the perception of the role of accountants today. To determine if these roles were significant in determining the level of involvement of accountants in the sustainability reporting process, a one-sample t-test was conducted. As can be seen in Table 7.8, all roles were considered significant in determining the level of involvement by accountants in the sustainability reporting process.

Table 7.8
T-Test
Mail Survey - Role of Accountants in the Sustainability Reporting Process: Test Statistics

Role of Accountants	Mean	Std. Deviation	Number	t-test	df	Sig. (2 tailed)
Sustainability Report Preparer	3.54	1.069	46	3.449	45	.001
Key Decision-Maker	3.42	1.076	45	2.631	44	.012
Advisory Role	4.00	.640	45	10.488	44	.000
Bookkeeping Role	3.73	.986	45	4.988	44	.000
Monitoring Role	3.68	.800	44	5.651	43	.000
Assists in Financial Costing	4.29	.506	45	17.103	44	.000
Part of Reporting Team	3.52	.917	42	3.702	41	.001
Financial Information Provider	4.39	.537	46	17.586	45	.000

Those respondents that had indicated they did not utilize accountants were asked why they did not. Their responses are now examined.

7.2.5 Why are Accountants not used in Sustainability Reporting?

Of the forty-six authorities (Table 7.2) that had indicated that they did not use accountants, nine authorities provided two or more reasons why they did not. A total of fifty-five reasons were offered for not including accountants (Table 7.9). The most commonly cited reason was accountants do not have the expertise required in sustainability reporting (30.90%). This finding concurs with that of Adams and McNicholas (2007) who, in utilizing a case-study action research approach on a

government-owned water statutory authority, found that lack of knowledge and experience is a key impediment towards the development of a sustainability reporting framework. Other common reasons provided by respondents are that accountants are too busy with other reporting requirements (21.80%) and the organization has never considered using them (20.00%).

Table 7.9
Mail Survey – Why are Accountants Not Used in Sustainability Reporting?

Reasons for Non-Use	**Total**	**%**
No response	1	1.80
Never considered using accountants	11	20
Too busy with other reporting requirements	12	21.80
No expertise in sustainability reporting	17	30.90
Too costly to utilize	5	9.10
Skills are considered irrelevant	6	10.90
Other	3	5.50
Total	55	100%

Further analysis was conducted to determine if the departments that prepare sustainability information preferred particular reasons as to why accountants are not used. Major results indicated that the environmental department and strategic planning department respondents favoured the reason 'no expertise in sustainability reporting' (34.48% and 42.85% of all responses from each department, respectively) whilst the finance department favoured the reason 'too busy with other reporting requirements' (35.71% of all responses from that department). The corporate planning department favoured two reasons being 'no expertise in sustainability reporting' and 'too costly to utilize' (29.41% each, respectively) as reasons to explain their non-usage of accountants.

7.3 Sustainability Frameworks Being Utilized by Local Government Authorities

The fifth research question sought to examine and determine what sustainability frameworks are currently being utilized by local government in Australia. It was expected that the dominant framework being utilized would be the GRI framework (Dumay *et al.* 2010; Dickinson *et al.* 2005). However, based on prior research (Tort 2010; Sciulli 2009; Guthrie and Farneti 2008; Herbohn and Griffiths 2008; Mladenovic and van der Laan 2007; Mercer and Jotkowitz 2000), it was anticipated that there will be no consistent core of reporting elements being used to report on sustainability and that the GRI framework would not be relevant to the needs of the local government sector in Australia. Further, evidence suggests that there will be no consistent definition of sustainable development being utilized in local government authorities in Australia (Farneti and Guthrie 2009; Guthrie and Farneti 2008).

7.3.1 Introduction

In an effort to focus initially on how local authorities are reporting their sustainability information, respondents were asked to indicate the type and frequency of reporting methods they predominantly utilize in reporting voluntary sustainability information (using a five-point scaled response from never use to always use) with results provided in Table 7.10 .

Table 7.10
T-Test
Mail Survey – Type and Frequency of Reporting Methods Utilized: Test Statistics

Reporting Method	Mean	Std. Deviation	Number	t-test	df	Sig. (2 tailed)
Single Index	3.13	1.055	55	.895	54	.375
Collection of Indicators	3.95	.710	76	11.635	75	.000
Financial Measures	4.08	.752	78	12.649	77	.000
Written Explanations	4.22	.570	81	19.295	80	.000
Other non-financial measures	3.77	.796	71	8.196	70	.000

Results highlight that a range of reporting methods is being utilized by local government authorities to report voluntary sustainability information. Such methods include collections of indicators ($t=11.635$, $p<.001$), financial measures ($t=12.649$, $p<.001$), written explanations ($t=19.295$, $p<.001$) and other non-financial measures ($t=8.196$, $p<.001$) with the single index method providing the only insignificant result ($t=.895$, $p>.05$).

7.3.2 The GRI and PASS Reporting Frameworks

Local authorities were then asked if they had heard of the GRI or the PASS (Table 7.11). Only 27% of those respondents that reported voluntary sustainability information had heard of the GRI with even fewer respondents having heard of the PASS (15.8%). Those respondents that had indicated that they had heard of either the GRI or the PASS were asked to indicate if they utilized either framework in preparing external voluntary sustainability information. Of the twenty-six respondents that had heard of the GRI, only eight respondents utilized the framework whilst of the fifteen respondents that had heard of the PASS, only three used the PASS framework. These results are quite surprising considering the promotion of the GRI framework as being regarded as international best practice.

Table 7.11
Mail Survey – Sustainability Frameworks

	GRI	**%**	**PASS**	**%**
Heard of:				
Yes	26	27.37	15	15.79
No	69	72.63	80	84.21
Total	**95**		**95**	
Use:				
Yes	8	30.77	3	20
No	18	69.23	12	80
Total	**26**		**15**	

Of the local authorities that had indicated that they used either the GRI or the PASS frameworks, three respondents used both frameworks whilst five utilized the GRI exclusively (thereby providing a total of eight respondents that used one or both guidelines). Of the three respondents that used both guidelines, two were classified as capital city authorities and the other as a remote rural authority.

It is interesting to note that of the five authorities that used the GRI framework exclusively, only two had heard of the PASS. Whilst this is a small sample and generalizations are difficult to make, it is surprising that the other three authorities were not aware of a sector supplement specifically developed for their sector by the GRI. This is an issue for further investigation at interview to determine if this is a recurring theme in local government.

The respondents that had utilized either or both guidelines were asked to indicate the importance of each guideline in the preparation of their sustainability information (using a five-point interval response from very unimportant to very important). Mean results are provided in Table 7.12, indicating a higher level of perceived importance of the GRI guidelines (4.38). Due to the low number of respondents to this question (eight), to test the significance of these results, non-parametric tests were utilized in the form of one-sample Wilcoxon signed ranked testing.

Table 7.12
One-Sample Wilcoxon Signed Rank Test
Mail Survey - Importance of GRI and PASS Frameworks: Test Statistics

Guideline	Mean	Number	z-test	Significance
GRI	4.38	8	2.341	.015
PASS	3.33	3	.000	1.00

Whilst caution needs to be used in interpreting these results due to the low number of responses, it appears that users consider the GRI guidelines to be more important than the PASS guidelines ($z=2.341$, $p<.05$).

7.3.3 Significance of the GRI/PASS Frameworks

The respondents that had utilized either or both guidelines (eight) were asked why they used the guidelines (using a five-point scaled response from very insignificant to very significant), with results shown in Table 7.13.

Table 7.13
Mail Survey – Why Use The GRI/PASS Frameworks?[3]

Why Use the GRI/PASS?	Did Not Respond %	Very Insignificant %	Insignificant %	Neutral %	Significant %	Very Significant %
International Best Practice	12.50	-	-	12.50	37.50	37.50
Consistent and Comparable	12.50	-	-	-	50	37.50
Well Regarded	25	-	-	12.50	50	12.50
Provide Good Information	25	-	-	-	62.50	12.50
Provide Common-Sense Indicators	25	-	-	25	37.50	12.50
Provide a basis for Development	12.50	-	-	12.50	62.50	12.50
Not Aware of any other Guidelines	25	-	12.50	25	25	12.50
Access Additional Funding	25	12.50	12.50	-	37.50	12.50
Other Organizations are Using Them	25	-	-	12.50	50	12.50

The most important factor viewed as being significant to very significant by respondents in explaining why these use either or both the GRI/PASS was that the frameworks are considered to provide high levels of consistency and comparability (87.50%). The next significant reasons were the guidelines are considered as being international best practice, they are seen to provide good information and they provide a basis from which to develop their own practices (each 75%). To determine if these were significant reasons, a

[3] Ibid.

one-sample Wilcoxon signed rank test was conducted (Table 7.14).

Table 7.14
One-Sample Wilcoxon Signed Rank Test
Mail Survey - Why use the GRI/PASS Frameworks: Test Statistics

Reasons	Mean	Number	z-test	Significance
International Best Practice	4.29	7	2.144	.031
Consistent and Comparable	4.43	7	2.341	.015
Well Regarded	4.00	7	1.979	.062
Provide Good Information	4.17	6	2.222	.031
Provide Common-Sense Indicators	3.83	6	1.700	.125
Provide a basis for Development	4.00	7	2.222	.031
Not Aware of any other Guidelines	3.50	6	-.188	1.00
Access Additional Funding	3.33	6	.432	.781
Other Organizations are Using Them	4.00	6	1.979	.062

From an examination of the results, a number of reasons was considered significant in determining why the GRI/PASS guidelines are used by authorities. Such reasons include the guidelines are perceived to be international best practice ($z=2.144$, $p<.05$), they provide high levels of consistency and comparability ($z=2.341$, $p<.05$), they are seen to provide good information ($z=2.222$, $p<.05$) and they provide a basis from which local authorities can develop their own practices ($z=2.222$, $p<.05$).

7.3.4 Restrictions on the GRI/PASS Frameworks

Mail respondents that used either or both the GRI/PASS guidelines (eight) were also asked to indicate the importance of seven reasons (using a five-point scaled response from very unimportant to very important) in restricting the use of either or both of the guidelines[4]. A one-sample Wilcoxon signed rank test was conducted to determine if any of the reasons were considered important by local authorities. Results (Table 7.15)

[4] Ibid.

indicate that none of the reasons are considered important in restricting the use of the frameworks. It had been expected that the GRI/PASS framework would not be specific to the needs of the local government sector. However, reason number one, 'the guidelines are not specific enough' does not appear to be an influencing factor in restricting the use of either or both of the guidelines ($z=.565$, $p>.05$). Further, investigation is required at interview to determine what reasons are restricting the usage of these frameworks for GRI/PASS users.

Table 7.15
One-Sample Wilcoxon Signed Rank Test
Mail Survey - Restrictions in Using the GRI/PASS Frameworks: Test Statistics

Reasons	Mean	Number	z-test	Significance
Are not specific enough	3.33	6	.565	.750
Are difficult to apply	3.83	6	1.555	.187
Are not very useful	3.00	6	.000	1.00
Too general in information	3.17	6	.222	1.00
Are too prescriptive	3.29	7	.542	.765
Unable to meet the diversity	3.33	6	.565	.750
Lack of support from senior management	3.00	6	.000	1.00

7.3.5 Why Are the GRI/PASS Frameworks Not Used?

Those respondents that had heard of the GRI/PASS but did not utilize one or both of the guidelines were asked to explain why they do not by indicating the importance of seven reasons (using a five-point scaled response from very unimportant to very important). This equated to a total of twenty authorities (ten of these authorities had heard of both guidelines but used neither, two authorities had heard of both but only used the GRI guidelines whilst the remaining eight had only heard of the GRI guidelines but did not use them). Results are provided in Table 7.16.

Table 7.16
Mail Survey – Why Are The GRI/PASS Frameworks Not Used?[5]

Why Not Use the GRI/PASS	Did Not Respond %	Very Insignificant %	Insignificant %	Neutral %	Significant %	Very Significant %
Not Relevant	45	5	5	30	10	5
Lack of Resources	20	-	-	15	50	15
Lack of Expertise	35	-	10	15	40	-
Non-Supportive Culture	45	-	-	30	25	-
Not Specific Enough	45	-	15	25	5	10
Cost of Preparation	45	-	10	25	20	-
Non-Availability of Data	35	-	10	10	40	5

The most important to very important reason found was lack of resources (65.00%) with the next most important factor being non-availability of data (45%). To examine the significance of each of the reasons, a one-sample Wilcoxon signed rank test was conducted with the results provided in Table 7.17. Reason two was the only significant reason in helping to explain why authorities do not utilize the GRI/PASS guidelines –lack of resources ($z=3.320$, $p<.001$). Sixteen authorities responded to this reason; on further analysis, it was found 12 were urban and four were rural authorities. Fifty per cent of the urban authorities were classified as 'very large' in their respective categories, having populations of more than 120,000. This is interesting when compared to the mail survey findings (Section 6.5.5) where lack of funding was found to be a more significant reason for rural authorities (when compared to urban authorities) in helping to explain what factors restrict or prevent sustainability reporting. Perhaps urban authorities have similar funding issues but these issues are specific to the GRI/PASS guidelines.

[5] Ibid.

Table 7.17
One-Sample Wilcoxon Signed Rank Test
Mail Survey - Why Are The GRI/PASS Frameworks Not Used: Test Statistics

Reason	Mean	Number	z-test	Significance (2 tailed)
Not Relevant	3.09	11	.138	1.00
Lack of Resources	4.00	16	3.320	.000
Lack of Expertise	3.46	13	1.839	.109
Non-Supportive Culture	3.45	11	2.087	.062
Not Specific Enough	3.18	11	.540	.531
Cost of Preparation	3.18	11	.699	.687
Non-Availability of Data	3.62	13	2.089	.055

As previously indicated (Section 7.3.4) it had been expected that the GRI/PASS guidelines would not be specific to the needs of local government in Australia. However, this was not found to be an influencing factor by respondents in restricting the use of either or both of the guidelines (Table 7.15). Perhaps this factor may help to explain why respondents do not use the guidelines. However, in examination of the reasons why respondents do not utilize these guidelines (Table 7.17), factor five, 'the guidelines are not specific enough' does not appear to be an influencing factor in deciding not to use these guidelines ($z=.540$, $p>.05$). It appears, therefore, that other reasons, such as lack of resources, have a more important role to play in determining the usage of the guidelines.

To determine what local authorities regard as important sustainability reporting issues, they were asked to indicate the importance of a number of reporting elements.

7.3.6 Reporting Elements

The GRI are promoted by many (Moneva *et al.* 2006; Dickinson *et al.* 2005; Morhardt *et al.* 2002) as being the leading guidelines internationally today. However, the mail survey results (Section 7.3.2) do not support this statement from the viewpoint of local government sustainability reporting in Australia. Perhaps, though, respondents are

reporting on reporting elements as required by the guidelines but are just not aware that they are doing so. However, previous research does not support this; the limited research that has been conducted has found that elements being reported on were diverse in nature and both the number of disclosures and patterns varied widely (see, for example, Guthrie and Farneti 2008; Herbohn and Griffiths 2008; Mercer and Jotkowitz 2000). It was, therefore, expected that there would be no consistent core of reporting elements being utilized in sustainability reporting in Australian local government.

Respondents were asked to indicate the importance of forty-three reporting elements (using a five-point scaled response from very unimportant to very important) in regards to reporting on sustainability. These reporting elements are the reporting aspects identified in the GRI guidelines and the disclosure elements/aspects from the PASS guidelines[6]. However, respondents were not advised where these reporting elements had originated.

The reporting elements were separated into environmental (nine), social (twenty-three) and economic (five) elements. The social elements were further sub-divided into five categories, being labour practices and decent work, human rights, society, product responsibility and administrative efficiency. There was also a further section of reporting elements for public policy (six) which represented the disclosure elements required by the PASS. One-sample t-tests were conducted as shown in Table 7.18 (columns 1-3). All reporting elements were found to be significant at the .001 level with the exception of elements 18, 19 and 20 which were all in the area of human rights. Element 18 examined forced and compulsory labour and was significant at the .05 level (t=2.099). Element 19 was in relation to child labour and was not significant at the .05 level (t=1.900) whilst element 20 was in relation to security practices and was significant at the .01 level (t=3.393).

[6] As previously identified in Section 3.4.1.1 and 3.4.1.4; composed of thirty-four aspects from the GRI Guidelines, six disclosure elements and three aspects from the PASS guidelines.

Table 7.18
T-Tests
Mail Survey - Reporting Elements of Sustainability Reporting: Test Statistics

#	Reporting Elements	One-Sample T-test				Independent Groups T-test		
		T-test (1)	df (2)	Sig. (2-tailed) (3)		T-test (4)	df (5)	Sig. (2-tailed) (6)
	Environmental Reporting Elements							
1	Materials	7.677	93	.000		1.105	92	.272
2	Energy	13.436	93	.000		2.548	92	.012
3	Water	18.050	92	.000		1.443	91	.152
4	Biodiversity	11.753	93	.000		2.528	92	.013
5	Emissions, Effluents and Waste	12.956	93	.000		1.505	92	.136
6	Products and Services	6.717	92	.000		1.549	91	.125
7	Compliance with Environmental Laws and Regulations	12.397	93	.000		1.444	92	.152
8	Environmental Impacts of Transporting Products	5.310	93	.000		.739	92	.462
9	Total Environmental Protection Expenditures	8.794	93	.000		.401	92	.689
	Social Reporting Elements							
	Labor Practices and Decent Work Elements							
10	Employment	11.944	93	.000		.939	92	.350
11	Labor/Management Relations	10.694	93	.000		.144	92	.886
12	Occupational Health and Safety	14.630	93	.000		.938	92	.350
13	Training and Education	13.233	93	.000		1.947	92	.055
14	Diversity and Equal Opportunity	12.044	93	.000		2.535	92	.013

Table 7.18 (continued)

#	Reporting Elements	One-Sample T-test				Independent Groups T-test		
		T-test (1)	df (2)	Sig. (2-tailed) (3)		T-test (4)	df (5)	Sig. (2-tailed) (6)
	Human Rights							
15	Investment and Procurement Services	8.349	92	.000		.566	91	.573
16	Non-Discrimination	9.097	92	.000		-.006	91	.995
17	Freedom of Association and Collective Bargaining	6.004	92	.000		2.361	91	.020
18	Forced and Compulsory labor	2.099	90	.039		-.037	89	.971
19	Child Labor	1.900	91	.061		.223	90	.824
20	Security Practices	3.393	91	.001		1.298	90	.198
21	Indigenous Rights	5.657	92	.000		1.408	91	.163
	Society							
22	Programs and Practices that Assess and Manage the Impacts of Operations on Communities	11.015	91	.000		.581	90	.563
23	Corruption	10.069	91	.000		.367	90	.715
24	Public Policy	10.495	92	.000		-.538	91	.592
25	Anti-Competitive Behaviour	6.897	92	.000		.349	91	.728
26	Compliance with Laws and Regulations	12.544	92	.000		.774	91	.441
	Product Responsibility							
27	Customer Health and Safety	8.492	92	.000		.319	91	.751
28	Product and Service Labeling	4.636	92	.000		1.184	91	.240
29	Marketing Communications	6.855	92	.000		2.883	91	.005
30	Customer Privacy	9.287	92	.000		1.240	91	.218

Table 7.18 (continued)

#	Reporting Elements	One-Sample T-test				Independent Groups T-test		
		T-test (1)	df (2)	Sig. (2-tailed) (3)		T-test (4)	df (5)	Sig. (2-tailed) (6)
31	Compliance with Laws and Regulations concerning the use of Products and Services	9.203	92	.000		1.625	91	.108
	Administrative Efficiency			.000				
32	Efficiency and Effectiveness of Services	12.800	92	.000		.648	91	.519
	Economic Reporting Elements			.000				
33	Economic Performance	14.116	92	.000		.682	91	.497
34	Market Presence	3.664	92	.000		.273	91	.785
35	Indirect Economic Impacts	7.035	92	.000		.712	91	.479
36	Expenditures	14.813	93	.000		.424	92	.673
37	Procurement	12.191	93	.000		.430	92	.668
	Public Policy Reporting Elements			.000				
38	Definition of Sustainable Development Used	10.652	93	.000		1.196	92	.235
39	Identification of the aspects that Sustainable Development Policies have been developed for	10.338	93	.000		.980	92	.330
40	Identification of the Specific Sustainable Development Goals for your organization	12.960	93	.000		1.328	92	.187
41	Description of the Process by which the aspects and goals were developed	8.497	92	.000		.413	91	.681

Table 7.18 (continued)

#	Reporting Elements	One-Sample T-test				Independent Groups T-test		
		T-test (1)	df (2)	Sig. (2-tailed) (3)		T-test (4)	df (5)	Sig. (2-tailed) (6)
42	Identification of Key Indicators used to Monitor Progress, actions to ensure continuous improvement, any post-implementation assessments and targets	12.800	92	.000		1.193	91	.236
43	Description of the role and engagement with stakeholders in relation to sustainability	10.699	92	.000		1.655	91	.101

Whilst it appears that local authorities are not directly utilizing the GRI/PASS frameworks, authorities consider the vast majority of reporting elements (forty of the forty-three were significant at the .001 level) contained in these frameworks as significant in regards to reporting on sustainability. Therefore, it appears there may be a difference in what respondents consider important in reporting and what they are actually reporting. Or, perhaps, respondents are reporting on these reporting elements but are just not aware that they are using GRI/PASS reporting elements. This is an issue to be considered further at interview.

In a further examination of the data, independent group t-testing was conducted to determine if there were any significant differences by type of reporter (integrated reporter or not integrated) and perceived importance of the reporting elements. Five significant differences were found (Table 7.18 – columns 4-6). Two of these differences were environmental reporting elements – being energy ($t=2.548$, $p<.05$) and biodiversity ($t=2.528$, $t<.05$). Whilst the remaining three were social reporting elements – diversity and equal opportunity ($t=2.535$, $p<.05$), freedom of association and collective bargaining ($t=2.361$, $p<.05$) and marketing communications ($t=2.883$, $p<.01$). On analysis of the mean scores for each of these five reporting elements (Table 7.19), all elements received a higher mean score for integrated reporters in comparison to non-integrated reporters. Thus, integrated reporters considered these five reporting elements to be of a higher importance than reporters not reporting from an integrated perspective.

Table 7.19
Mail Survey - Reporting Elements of Sustainability Reporting: Descriptive Statistics

#	Reporting Elements	Classification	Number	Mean	Std. Deviation	Std. Error Mean
2	Energy	Integrated Non-Integrated	66 28	4.23 3.79	.780 .738	.096 .140
4	Biodiversity	Integrated Non-Integrated	66 28	4.08 3.64	.730 .826	.090 .156
14	Diversity and Equal Opportunity	Integrated Non-Integrated	66 28	4.12 3.68	.755 .819	.093 .155
17	Freedom of Association and Collective Bargaining	Integrated Non-Integrated	65 28	3.65 3.21	.799 .833	.099 .157
29	Marketing Communications	Integrated Non-Integrated	65 28	3.71 3.21	.785 .686	.097 .130

It appears, therefore, that the type of reporter (whether integrated or non-integrated) may be one influencing factor in determining the level of importance of reporting elements by respondents. In an effort to consider other reasons, respondents were asked to indicate the significance of five reasons (using a five-point scaled response from very insignificant to very significant) in helping to explain differences in the perceived importance of different reporting elements (Table 7.20).

Table 7.20
Mail Survey – Reporting Element Reasons[7]

Importance of Reporting Elements	Did Not Respond %	Very Insignificant %	Insignificant %	Neutral %	Significant %	Very Significant %
Data is readily available	9.46	1.06	1.06	11.58	45.26	31.58
Elements are of high importance to the organization	11.58	-	-	10.53	48.42	29.47
Requested by stakeholders	14.74	-	6.32	23.15	38.95	16.84
Other organizations are reporting on this information	17.91	-	8.42	35.79	28.42	9.46
Relates to the organizations focus on sustainability reporting	14.74	-	1.06	11.56	46.32	26.32

The three major reasons that were considered significant to very significant by respondents were the reporting elements were of high importance to their organization (77.89%), the data are readily available (76.84%) and reporting elements relate to their organizational sustainability reporting focus (72.64%). To determine if these were significant reasons, a one-sample t-test was conducted. As indicated in Table 7.21, all reasons are considered significant at the .001 level with the most significant being the reporting elements chosen are of high importance to their organization ($t=17.352$, $p<.001$). The least important (yet still significant at the .001 level) reasons were 'other organizations are reporting on this information' ($t=5.028$, $p<.001$) and 'requested by stakeholders' ($t=8.221$, $p<.001$).

[7] Refer Appendix VIII for absolute numbers.

Table 7.21
T-Test
Mail Survey - Reporting Element Reasons: Test Statistics

Reason	Mean	Std Deviation	Number	t-test	df	Sig. (2 tailed)
Data is readily available	4.16	.780	86	13.824	85	.000
Elements are of high importance to the organization	4.21	.641	84	17.352	83	.000
Requested by stakeholders	3.78	.851	81	8.221	80	.000
Other organizations are reporting on this information	3.47	.833	78	5.028	77	.000
Organizations focus on sustainability reporting	4.15	.691	81	14.950	80	.000

7.3.7 Other Reporting Frameworks

In an effort to determine if other reporting frameworks were being utilized by local authorities other than the GRI or PASS, local authorities were asked to indicate if they referred to any frameworks (other than the GRI or PASS guidelines) in the preparation of their voluntary reporting information. As previously discussed (Section 6.2.5), a number of respondents did not respond to this question (thirty-four respondents). Perhaps they were not sure themselves which other frameworks (if any) were being utilized by their local authorities.

Of those respondents that did provide an answer to this question (sixty-one), a number of authorities indicated that they were utilizing a combination of frameworks. Of the sixty-one, thirty-five authorities (57%) utilized one reporting framework with the remainder utilizing more than one reporting framework to prepare their sustainability information. To indicate the extent of frameworks, one authority used a combination of eight reporting

frameworks. This provided for a total of 110 responses, as provided in Table 7.22. The main frameworks being utilized were the balanced scorecard (26.36%), own in-house developed guidelines (20%) and the ISO 14000 series (19.09%).

Table 7.22
Mail Survey – Reporting Frameworks

Reporting Framework	Number	%	Total Number	%
OECD Guidelines	3	2.73	3	2.48
ISO 14000 Series	21	19.09	21	17.36
Accountability AA 1000AS	10	9.09	10	8.26
UNEP /Sustainability	4	3.64	4	3.31
Balanced Scorecard	29	26.36	29	23.97
Ecological Scorecard	4	3.64	4	3.31
Melbourne Toolkit (ICLEI)	14	12.73	14	11.57
In-House Developed Guidelines	22	20.00	22	18.18
Other	3	2.73	3	2.48
GRI/PASS	-	-	11	9.09
Total	110	100%	121	100%

It had been expected that local governments in Australia would utilize the GRI framework in their sustainability reporting practices. However, as previously shown in Table 7.11, only eleven affirmative responses were provided in relation to the usage of either the GRI or PASS guidelines. By including these eleven responses in Table 7.22, this now provides a total of 121 reporting frameworks being utilized by respondents that report on sustainability in local government. Of the total reporting frameworks being utilized, the GRI/PASS guidelines are only being utilized by 9.09% of reporting respondents.

Previous research has established that the term 'sustainable development' has multiple meanings. This was found in the research of Farneti and Guthrie (2009) and Guthrie and Farneti (2008). It was expected that this trend will continue with no consistent definition of sustainable development being utilized in local government authorities in Australia. This is now examined.

7.3.8 Definition of Sustainable Development

Local authorities were asked to provide the definition of sustainable development that they utilize to guide them in the preparation of their sustainability information. Thirty-four respondents did not respond to this question (as previously discussed in Section 6.2.5). A possible explanation for this omission is that they were not sure themselves which definition was being utilized by their local authority or even, in fact, if their local authority had a definition.

Of those authorities that responded to this question, ten indicated that they utilized a combination of known definitions to guide them, with two of them indicating the use of three different definitions. This provided a total of seventy-three definitions. On analysis of the results (Table 7.23), there appears to be a lack of consistency in which definition is being utilized by local government. The two main definitions being used were in-house developed definitions (31.51%) and the ISO 14000 definition (24.66%).

Table 7.23
Mail Survey – Sustainable Development Definition Being Utilized

Definition	Number	%
Brundtland Report	11	15.07
National Ecological Sustainable Development	8	10.96
LA21	3	4.11
ISO 14000	18	24.66
AA1000	2	2.74
In-House Developed	23	31.51
Other	8	10.96
Total	73	100%

In an effort to determine why organizations have chosen their particular definition of sustainable development, authorities were asked to explain by indicating the importance of five reasons (using a five-point interval scale from very unimportant to very important). Again, as previously indicated (Section 6.2.5), this question (question 35) was not answered by all respondents. However, this perhaps would have been expected considering that the previous question (question 34) examining the definition of sustainable development being utilized by local authorities was not answered by a number of respondents. If respondents were not sure what definition they were actually utilizing and, therefore, did not respond to question 34, how would they be expected to know the importance of a number of reasons in determining the organization's choice of definition of the term 'sustainable development'.

T-testing was conducted to determine the level of significance of these reasons as provided in Table 7.24. The first three reasons were considered significant at the .001 level. These three reasons considered the importance of ensuring the definition chosen is consistent with the reporting framework/guidelines utilized by the organization ($t=14.106$, $p<.001$), the importance of matching the definition with the organization's

values and goals (t=15.306, p<.001) and the importance of utilizing a common and well-known definition (t=6.375, p<.001). One further reason was significant at the .05 level being the importance of other organizations utilizing the definition (t=2.169, p<.05) with the final reason, reason five, not significant at the .05 level (t=-.504, p>.05). This factor examined the importance of the definition being provided by higher level management with no explanation provided.

Table 7.24
T-Test
Mail Survey - Importance of Sustainable Development Definition: Test Statistics

Reason	Mean	Std Deviation	Number	t-test	df	Sig. (2 tailed)
Consistent with the framework chosen	4.12	.613	60	14.106	59	.000
Matches the organizations values and goals	4.07	.544	61	15.306	60	.000
Is the most common and well-known definition	3.67	.803	58	6.375	57	.000
Other organizations are using this definition	3.29	.986	56	2.169	55	.034
Was provided by higher level management with no explanation provided	2.92	1.122	50	-.504	49	.616

To determine if there were any significant associations between the definitions utilized by respondent organizations and the reasons why the particular definition was chosen, Pearson product-moment correlation testing was conducted, as provided in Table 7.25.

Table 7.25
Pearson Product-Moment Correlation Testing
Mail Survey - Importance of Sustainable Development Definition: Test Statistics

Reason	Pearson Correlation	Sig. (2 tailed)	Number
Consistent with the framework chosen	.084	.502	67
Matches the organizations values and goals	.012	.924	66
Is the most common and well-known definition	-.068	.594	63
Other organizations are using this definition	.132	.324	58
Was provided by higher level management with no explanation provided	.406	.003	52

From an examination of the results, there appears to be a significant positive correlation ($r=.406$, $p<.01$) between the definition being utilized by local authorities and reason number five, that is, the definition was provided by higher level management with no explanation provided. On further investigation of the definitions being utilized, nine of the fourteen respondents that considered this reason to be of importance to high importance were using either the ISO 14000 definition or an in-house developed definition.

7.4 Summary

This chapter provided the analysis in relation to the fourth and fifth research questions posed for this research study. The next chapter provides the results and analysis from the interview process.

Chapter 8 Data Analysis and Results: Interviews

8.1 Introduction

To complement the survey data a number of interviews was undertaken with local government authorities. Interview results are discussed in this chapter, commencing with a discussion on the interview process adopted followed by an examination of the interview responses from those local government organizations that were interviewed.

8.2 Interview Process

8.2.1 Introduction

The interview response rates, the pilot testing process, the conduct of the interviews and the subsequent analysis of interview data are now discussed.

8.2.2 Interview Response Rate

The invitation letter for interview[1] was sent to a total of 180 potential respondents in October 2009. A total of fourteen affirmative responses and four negative responses was returned. Of the fourteen responses, seven were from urban regional authorities and seven were from very large/large rural agricultural authorities. Table 8.1 provides this detail along with the number of respondents in each State of Australia. Victoria provided the highest number of interview respondents (64.29%) with NSW having the second highest response rate (21.43%).

[1] See Appendix III for the invitation letter for interview.

Table 8.1
Interviews - Number of Respondent Organizations

State of Australia	Number of Urban Regional Local Authorities	Number of Rural Agriculture (Very Large/Large) Local Authorities	Total by State
NSW	1	2	3
Victoria	5	4	9
Queensland	1	-	1
Tasmania	-	1	1
Total	7	7	14

Whilst fourteen local government organizations indicated initially that they were willing to be interviewed, the Tasmanian authority subsequently declined to be interviewed without explanation. Three authorities allowed interviews with a number of members of staff. In total, eighteen interviews were conducted with local authorities.

Further, three external organizations involved with local authorities in sustainability activities/reporting agreed to be interviewed. One of the external organizations allowed two different members of staff to be interviewed; thus, four interviews were conducted with external organizations. This provided for a total of twenty-two interviews across sixteen organizations (thirteen local government and three external organizations)

8.2.3 Pilot Testing

Prior to undertaking interviews the proposed interview questions were pilot-tested by two colleagues within the School of Accounting and Corporate Governance at the University of Tasmania. This review did not identify the need for any major changes in the interview questions or format.

8.2.4 Conduct of Interviews

All interviews were conducted face-to-face at each respective local authority/external organization's premises during the months of November/December 2009 with the exception of one, due to the interviewee not being available. As such, a telephone interview was arranged and was subsequently conducted in February 2010. Interviews varied in length from approximately half an hour for the shortest interview to approximately two-and-a-half hours for the longest interview. Details of the interview schedule are provided in Appendix VI.

8.2.5 Analysis of Interview Data

Interviews were tape-recorded and then transcribed from the tapes by an independent person. All transcripts were checked against the original tapes and then forwarded to the interview participants to ensure that they agreed that the transcripts were a true and accurate record of the interviews. No major changes were noted with minor changes involving either the altering of the word order or, less frequently, substituting words to clarify what was said.

The transcripts were then manually analyzed over a three month period, February – April 2010. The process of analysis was similar in approach to that provided by Schmidt (2004) in that categories for the analysis were initially set-up after a process of detailed reading of the transcripts and then developed into a guide for coding. Two interview transcripts were manually coded using the coding guide and then checked by two peers within the School of Accounting and Corporate Governance. One change was made to the coding guide as a result of this checking mechanism.

Each interview was then manually coded according to the categories in the coding guide. This then permitted the inputting of the coded data into a computer spread-sheet which allowed for quantification of each category through frequencies and the identification of any patterns, themes and meanings in the data.

8.2.6 Secondary Data Source

To supplement the interviews and to gain a more complete understanding of each authority, documentary data were used as a secondary source. Documentary data included annual reports, strategic plans, environmental/sustainability plans, web-sites and environmental/sustainability reports.

8.3 Descriptive Interview Data

8.3.1 Introduction

The role of the respondent within each local government organization, the classification of the local authority according to the Australian Classification of Local Government (ACLG) and demographic data are now discussed.

8.3.2 Role of Interviewees

Senior personnel were interviewed in each of the organizations, with the highest percentage drawn from the Financial/Corporate Services area. Of the thirteen authorities, ten of the interviewees were either in the role of CFO or senior officer in the Financial/Corporate Services Department, equating to approximately 77% of the authorities interviewed. Details of the type of respondents are provided in Appendix VII.

8.3.3 Demographics

Descriptive details on each of the thirteen authorities are provided (Table 8.2), including population, size and total revenue for the 2008/2009 financial year, as provided in their financial statements.

Table 8.2
Interviews – Demographics of Local Authorities

Local Authority	ACLG Classification	Population	Size (km2)	Total Revenue $ (2008/09 Financial Year)
Local Authority A	Rural	17,187	6,652	32 M
Local Authority B	Rural	12,330	5,728	24 M
Local Authority C	Urban	59,972	2,422	105 M
Local Authority D	Urban	28,889	4,014	42 M
Local Authority E	Urban	49,321	313	83 M
Local Authority F	Rural	10,206	5,714	29 M
Local Authority G	Urban	34,504	433	46 M
Local Authority H	Urban	27,318	3,639	44 M
Local Authority I	Rural	12,574	4,797	24 M
Local Authority J	Urban	41,361	20,931	71 M
Local Authority K	Rural	5,987	3,230	14 M
Local Authority M	Rural	7,742	7,310	17 M
Local Authority L	Urban	32,600	7,120	77 M

In the next section, the responses of the interviewee respondents are examined and discussed in relation to each of the five research questions.

8.4 Analyses

The responses of the local authority interviewees are now examined and, where applicable, supplemented with responses from the external organizations. To avoid unnecessary duplication of discussion, research questions 1 and 2 are examined together.

8.4.1 Sustainability Reporting by Local Government Authorities and Differences in the Level of Reporting in Urban and Rural Government Authorities

The first research question sought to determine if sustainability reporting was being conducted by local government authorities whilst the second research question sought to examine if there are any differences in sustainability reporting by urban and rural local authorities in Australia.

8.4.1.1 Sustainability Reporting Amongst Interviewees

Reporting amongst interviewees was found to include both formal and informal types of sustainability reporting. Informal reporting for the purposes of this research included verbal internal/external reporting and/or ad hoc minor reporting of sustainability information with no formal reporting processes in place. Summarized results are provided in Table 8.3.

Table 8.3
Interviews – Sustainability Reporting

ACLG Classification	Reporting on Sustainability				
	Yes	**%**	**No**	**%**	**Total**
Urban	7	100	-	-	7
Rural	5	83.33	1	16.67	6
Total	12	92.31%	1	7.69%	13

Results indicate that 92.31% of interviewees (twelve) considered themselves to be reporting on sustainability in some manner (whether it be formal or informal reporting) with only one interviewee considering that they do not report. All urban authorities were reporting on sustainability whilst, in comparison, 83.33% of rural authorities were reporting on sustainability. Further analysis was undertaken on the reporting authorities

with detail provided on the focus of their reporting (Table 8.4).

Table 8.4
Interviews – Focus of Sustainability Reporting

ACLG Classification	Type of Reporting							
	Environmental		Social		Economic		Integrated	
	Number	%	Number	%	Number	%	Number	%
Urban	4	57.14	1	14.29	4	57.14	-	-
Rural	2	40	-	-	4	80	-	-
Total Reporting Authorities	6	50	1	8.33	8	66.67	-	-

The highest level of reporting was found to be economic with 66.67% of reporting authorities indicating that they reported on economic matters, followed by environmental reporting (50%) and social reporting (8.33%) with no authority indicating that they report from an integrated approach. These results highlight a difference in the type of reporting from the mail survey results (Section 6.4.1) where social reporting was found to be most prevalent amongst sustainability reporters (90.53%) followed by economic (84.21%) then environmental reporting (82.11%).

Of the seven urban interviewees, more reported on environmental and economic information (each 57.14%, respectively) with social information being reported by only 14.29% of interviewees. For the five rural interviewees reporting on sustainability, the most practiced component of reporting was economic information (80%) with environmental reporting being utilized by two of the respondents (40%).

With local authorities indicating that they undertake both formal and informal sustainability reporting, further analysis was undertaken to determine what types of authority (urban or rural) engaged in these forms of reporting (Table 8.5).

Table 8.5
Interviews – Type of Sustainability Reporting

ACLG Classification	Formal Reporting		Informal Reporting	
	Number	%	Number	%
Urban	4	44.44	5	55.56
Rural	1	20	4	80
Total	5	41.67%	9	75%

Of the twelve authorities that consider themselves as reporting (refer Table 8.3), some utilize either/or a combination of both formal and informal reporting with 41.67% of authorities reporting through formal reporting processes on sustainability whilst 75% of reporting authorities use informal means. When the numbers of authorities reporting in each respective ACLG classification were compared, this highlighted differences in classification with a higher proportion of rural respondents favouring informal means in comparison to urban respondents (80% to 55.56%).

One rural respondent highlighted the importance of informal approaches in smaller communities through indirect verbal communication with their stakeholders and energizing individuals within the community as more critical than formal sustainability reporting processes as such. They considered that formalized reporting on sustainability was of little importance, as the following quotation states:

> *'Everybody does those sorts of things (sustainability reporting). You ask people, you go to the general public and say, what is your council doing, they don't know. Well, they'll get a copy of it and read it from page to page, from front to back and write letters to the paper and that's as far as it will get. I'm afraid local government falls into the trap of producing doorstops and it would be just a report for the sake of a report' (Local Authority K- General Manager).*

From an urban perspective, in discussing reporting on sustainability through informal

means, more emphasis was placed on ad hoc low levels of reporting rather than the utilization of verbal communication as a means of reporting. For example:

> *'What reporting does go on, it's just a piecemeal thing' (Local Authority H – Sustainability Manager).*

> *'The unfortunate thing, is that's all we've done - the missing part is basically we haven't done anything formal (reporting) since to sort of say well basically, how we are travelling' (Local Authority G – Sustainability Director).*

Of the interviewees that were reporting through formal processes, analysis was conducted on the type of reporting medium being used to report on sustainability.

8.4.1.2 Reporting Media Being Utilized to Report Sustainability Information

Of the five authorities (Table 8.5) reporting through formal reporting processes, four indicated they were reporting formally through their annual reports (with one authority using both the annual report and management reports), with the fifth authority indicating that they utilized the web-site for reporting. Thus, the annual report was found to be the most utilized formal reporting medium of sustainability amongst interviewees (Table 8.6, column 1).

Table 8.6
Interviews – Reporting Media Being Utilized

Type of Reporting Media	**Formal Reporting**	**Informal Reporting**	**Total**	**Total %**	**Urban Numbers**	**Urban %**	**Rural Numbers**	**Rural %**
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Annual Report	4	1	5	31.25	4	36.37	1	20
Website	1	1	2	12.50	2	18.18	-	-
Management Reports	1	3	4	25	2	18.18	2	40
Newspaper	-	1	1	6.25	1	9.09	-	-
Verbal	-	4	4	25	2	18.18	2	40
Total	6	10	16	100	11	100	5	100

For the nine authorities that report utilizing informal and ad hoc reporting processes (Table 8.5), an array of reporting media was being utilized (Table 8.6, column 2) with external verbal reporting to the community and management reports being used the most amongst interviewees. When results were examined from a total reporting perspective (that is, both formal and informal reporting - columns 3 and 4), it can be seen that whilst annual reports are the most utilized (31.25%), there is a number of reports being used for reporting on sustainability. These findings support the results found in the mail survey (Section 6.4.6) where, whilst it was found that the annual report was being utilized the most by survey respondents, there was a number of different reporting media being used.

In further examining the results by urban and rural classifications (columns 5-8), the seven urban authorities utilized the annual report the most (36.37%), whilst of the five rural authorities, management reports and verbal reporting were being used the most (40% each, respectively).

In discussing where local authorities report on sustainability with the external interviewees, one of the external organizations considered that for local government '*there's more of a move to integrated reports (integrating the sustainability information with the annual reports)*' *(External Organization C - Sustainability Manager)*. The interview results do provide some support for this statement but due to the small sample size, it is recommended that further research be conducted.

One finding from the mail survey was that survey respondents indicated that there was an increase in sustainability reporting in the 2005 year with smaller percentage increases in subsequent years (Section 6.4.2). This finding was discussed with interviewees.

8.4.1.3 Commencement of Sustainability Reporting

With the survey results highlighting an increase in the 2005 year in the up-take of sustainability reporting, interviewees were asked to consider if they were aware of any possible explanation for this increase.

Whilst sustainability reporting was limited amongst interviewees, a number of explanations was provided with five authorities (from a total of eight that provided a

reason) considering that pressure from State government possibly commenced the reporting process through the State governments increased financial sustainability focus on councils and the increased awareness to plan for the longterm, which occurred approximately four years ago. Two authorities felt that the increased up-take in the 2005 year could have been more internally focused with the process commencing from higher levels of awareness by key leaders within the organization. However, again, the influence of external government pressure was highlighted with one of these authorities stating:

> '*Everybody is interested in wanting to do the right thing, but the mercenary side of me, and I'll freely admit this, was more for I'm not going to get caught by the government bringing in something we're not ready for' (Local Authority E - General Manager*).

The last authority, which commented on this particular issue, considered that the start-up of an externally based organization (a green-house alliance organization aimed at providing both government and non-government organizations with a platform to work together on reducing green-house gas emissions in their region), was the catalyst for action in relation to sustainability. However, again this alliance was initially developed and funded by State government.

Therefore, it appears that perhaps government pressure and processes had a key role to play in the commencement of sustainability reporting in the 2005 year. There may be some possible future changes coming to sustainability reporting with a small number of interviewees indicating that their local authority is in the process of either developing or further developing (for those reporters already currently reporting) such reporting processes. This is now discussed.

8.4.1.4 Awareness of Sustainability Reporting

Whilst it was clear that interviewees were 'aware' of sustainability issues, it was found that they were at different levels of awareness and knowledge towards sustainability reporting. Based on a methodological approach similar to Schmidt (2004), the thirteen authorities were categorized according to their level of awareness. Five analytical

categories were developed with each authority then assessed and coded according to these categories. Levels ranged from 'not aware' to those that were 'aware' to those in the process of 'developing reporting processes' (Table 8.7).

Table 8.7
Interviews – Level of Awareness of Sustainability Reporting

	Not Aware	Vague Awareness	Aware	Positive Awareness and Action	Developing Reporting Processes
Urban	1	3	1	1	1
Rural	-	3	1	2	-
Total	1	6	2	3	1
% Total	7.69%	46.15%	15.39%	23.08%	7.69%

Of the thirteen local government respondents, 30.77% (four) were positively aware and actively trying to develop or actually in the process of developing reporting processes for sustainability reporting. Of these authorities, one was actively engaged in the process of developing a sustainability reporting framework. They had been in this process for at least twelve months and having worked through a number of difficulties, anticipated that within the next twelve months, a reporting structure would be developed to report from a quadruple-bottom-line perspective (environmental, social, economic and governance).

> *'In terms of where (Local Authority E) is at, we've had a look at a system whereby we have tried to develop up specific sustainability things given there hasn't been a State framework to work to. … I think where we're at the moment… is that we've put something together that is a) too complex and b) not integrated with the community and council plan adequately. So no good having sustainability reporting separate from corporate and community reporting so we're trying to get those together .....' (Local Authority E – Sustainability Coordinator).*

Of the other three local authorities that were actively trying to develop sustainability reporting, two were in the very initial stages of commencing the process from a triple-

bottom-line approach and attempting to determine the initial steps to take.

> *'We're looking at triple bottom line at the moment....I'm just in the midst of the melee at the moment - trying to sort through that in my own head .... what we're going to do' (Local Authority L – Director Corporate Services).*

> *'But at this stage, I think it's going to be a case of crawling before we're walking' (Local Authority L – Director Corporate Services).*

> *'Well we're, we are starting. We're starting' (Local Authority F – Director Corporate & Community Services).*

The remaining local authority was in the initial process of commencing reporting from an environmental perspective but envisaged that such reporting would eventually encompass triple-bottom-line reporting in the future '*What I want is pretty much a triple-bottom-line approach for this organization' (Local Authority A – Sustainability Coordinator).*

The remaining 69.33% (nine) of interview respondents were at varying levels of awareness (see Table 8.7 for details) with encouraging results indicated in discussing the future of sustainability reporting. Seven authorities considered that their organization would move to commence this process in the future, as the following quotations indicate:

> *'I think it's inevitable (reporting on sustainability) because more and more the State and Federal governments are saying to us, you are crying poor, but you've got to demonstrate to us why.... more and more the government will be asking us to demonstrate why they should be giving us the funding and how it is being applied. And in order to do that, you need to have knowledge of lots of things – where you're at, what your assets are, what people want, where we've got to be and all that sort of stuff. .... That's where the triple-bottom-line stuff comes in' (Local Authority B – Manager Financial Services).*

> *'It's (reporting on sustainability) going to happen. It's only not if, it's when' (Local Authority J – Finance Manager).*

'We'll have to do it (report on sustainability) and in about 5 years time it'll be mandatory anyway .... if not possibly less' (Local Authority A – Financial Services Coordinator).

'We certainly want to get there (reporting on sustainability). I think you obviously can only do so much at a time though' (Local Authority C – General Manager Corporate Services).

Of the remaining local authorities, one had no plans at the current time to report in the future whilst the other local authority was unsure. Local authorities provided a number of reasons as to what is restricting sustainability reporting being either developed or developed further within their organization.

8.4.1.5 What is Restricting Sustainability Reporting?

Across the thirteen local government organizations, multiple reasons were provided in considering what is restricting sustainability reporting in local government, providing a total of seventy-one reasons, as shown in Table 8.8.

Table 8.8
Interviews – Restrictions to Sustainability Reporting

Reasons	Number (1)	% (2)	Urban (3)	% of Urban Total (4)	Rural (5)	% of Rural Total (6)
Lack of Inter-Departmental Cooperation	5	7.04	3	7.90	2	6.06
Lack of Expertise and Knowledge	11	15.49	6	15.79	5	15.15
Lack of Funding	10	14.08	5	13.16	5	15.15
Data Inadequacy	5	7.04	2	5.26	3	9.09
Lack of Community Interest	4	5.63	2	5.26	2	6.06
Lack of Support from Senior Management	4	5.63	3	7.90	1	3.03
Lack of Support from Councillors	5	7.04	1	2.63	4	12.12
Not addressed in the strategic plan/policies of organization	3	4.23	1	2.63	2	6.06
More important day-to-day issues	5	7.04	3	7.90	2	6.06
Culture within the organization	3	4.23	2	5.26	1	3.03
Not seen as a priority	3	4.23	1	2.63	2	6.06
Lack of guidelines	4	5.63	2	5.26	2	6.06
Lack of vision/focus of council	3	4.23	2	5.26	1	3.03
Political pressures	3	4.23	2	5.26	1	3.03
Lack of systems	1	1.41	1	2.63	-	-
Over-reporting	1	1.41	1	2.63	-	-
No current mandated requirement	1	1.41	1	2.63	-	-
Total	71	100%	38	100%	33	100%

The most commonly cited reasons were lack of expertise and knowledge (15.49% of all interviewee respondents) and lack of funding (14.08%). Whilst many of these reasons were consistent with the mail survey results (Section 6.5.5), there was a small number of reasons that were provided in addition to the survey results. Such reasons included the culture, the lack of vision/focus within the organization, the lack of available guidelines and political pressures. These reasons will be briefly discussed now.

The culture of the organization was considered by three respondents as a barrier to reporting on sustainability. One respondent, in providing an example of attempting to bring in changes to organizational policies to incorporate sustainability criteria, was made aware of the issues that change to the status quo could bring about within the

organization '*The response I got was that you have to be careful, this is a small place...' (Local Authority A – Sustainability Coordinator).*

Local Authority E highlighted the need to bring about change in the culture and thinking of the organization:

> *'We've got to inculcate it into our psyche and into our culture otherwise every four years, they'll be some rooster stand on a zero rates policy and they'll get elected and they'll change the rules. Whereas if its inculcated into thinking so when the engineer thinks instead of doing his usual bloody thing and over-spending, over-ordering, over-designing, over-whatever it might be, he actually thinks with a sustainability viewpoint in mind, as does the planning people and the eco development people and so on. If that's built into their psyche, into their culture, as good as it has been built into their culture to be wasteful.... that's when we'll have succeeded and the things we'll be reporting' (Local Authority E – General Manager).*

This viewpoint concurred with Jigsaw Services (2004), who in conducting a review of three local government organizations, considered in producing a TBL report, it was:

> '*not just about producing a few pages in an annual report, but involves a cultural change with a holistic approach involving a continual process of assessing councils' service mix and integrating business planning with strategic objectives...*' (p. 10).

Two external organizations also raised culture within the organization as a barrier to sustainability reporting. One considered that it (sustainability and sustainability reporting) '*is a very difficult thing for councils to get their head round and they've been sort of been doing things the same way for a very long time in councils ...***'** *(External Organization A-Environmental Manager)*. Further, it was highlighted by another external organization that, of those councils that do have sustainability officers, a lot of their time is taken up in trying to convince the people in their own organization that sustainability is important and is an issue that they need to be thinking about.

The lack of vision/focus by the authority was considered by three respondents as a barrier in restricting sustainability reporting. This was highlighted by Local Authority B.

'*We just don't have a focus on it (sustainability). Because the problem is, when you don't have a focus and a specific direction that your barrelling down, you will be distracted by any loud voice that comes along.... and you end up being very reactive'.*

'How we get pulled off on issues; we get completely distracted and we run around in circles and never get anywhere. It's because we're not focusing on things'.

'It's because you don't have a strategy and I don't blame the Councillors one bit. I mean they're just people off the street that are saying I'd like to improve things. But they don't have a clear idea of what they can do....' (Local Authority B – Manager Financial Services).

Lack of available guidelines was cited by four interviewees as a further barrier in restricting reporting. This was highlighted by Local Authority E, being an urban authority:

'One of the difficulties facing councils in sustainability has been the lack of guidelines… it's been difficult to build a network or a reporting network around something where you've got no... regulations, parameters, goals, targets whatever you want to call them. And for the smaller councils, it's even harder still' (Local Authority E – General Manager).

To gain a perspective from a smaller rural authority, Local Authority M, which was reporting on environmental information using informal processes, highlighted the lack of guidelines by indicating the current methods in developing reporting processes '*.my personal experience is the direction that its following at the moment' (Local Authority M – Environmental Coordinator).*

Finally, political pressures were raised by three interviewees as being a barrier to reporting on sustainability. This pressure included the devolvement of extra responsibilities to local government from State government, the continual pressure for amalgamations from State government, the attitudes towards local government and the lack of direction from both State and Federal governments in relation to sustainability.

Lack of direction by government was also considered by one of the external organizations who reasoned that if guidelines or rules were developed at the Federal level which stated what was considered important for sustainability reporting in local government and how to demonstrate transparency through reporting, councils would '*as quick as anything, take up reporting*'. This finding concurs with prior research that has examined implementation of local sustainability practices (such as Whittaker 1996; Tuxworth 1996; Worthington and Patton 1995) and including that of McKay and Rauscher (2007) who focused on the implementation of ecological sustainable development (ESD) strategies within Newcastle City Council. Their findings highlighted that greater cooperation, coordination and support is required from higher tiers of government if the implementation of ESD strategies is to be taken seriously. Whilst their research focused on strategies, not reporting, this may be a reoccurring theme in local government.

Other factors not considered by the local authority interviewees but raised as issues by the external organizations included issues with current annual reporting requirements that do not actively encourage reporting on sustainability. Such issues included the lack of reporting requirements in the annual report for reporting against measurable goals and targets and reporting indicators. Further, as discussed in Lamprinidi and Kubo (2008), the issue within local government of only wanting to disclose positive information but not wanting to report challenges and issues was seen as a further hindrance to sustainability reporting. This, perhaps, as suggested by one of the external organizations was being fuelled by elected officials who do not want to publicize what was not achieved within their municipality.

In further analysing the data, testing was conducted to determine if there was any difference in responses by classification type (urban or rural) with results provided in Table 8.8 (columns 3-6). Results indicated only minor differences between the two classifications - one difference highlighted is the level within the organization at which each classification cited lack of support. More urban authorities considered the lack of support from senior management, three (7.9%), urban authorities in comparison to one (3%), rural authority) as a reason restricting sustainability reporting whilst in comparison more rural authorities considered the lack of support was from councillors, four (12.1%)

rural authorities in comparison to one (2.6%) urban authority). Whilst this is only a small sample size, this is an issue that needs further research as perhaps the different management levels within local authorities have different levels of influence, depending on the size of the authority in the up-take of sustainability reporting in local government.
In discussing the reasons that are restricting sustainability reporting in local authorities, a small number of authorities highlighted a positive development within their organization that is helping to bring about sustainability reporting.

8.4.1.6 Incentives to Encourage Sustainability Reporting within Local Authorities

One positive development that was noted by a number of councils in helping to bring about sustainability and sustainability reporting was the inclusion of these authorities in environmental/sustainability groups within their region. Such groups included green-house alliances, sustainability partnerships and sustainability alliances. Six local authorities were members of such groups within their respective region. By being involved in these groups, it was felt that the groups were very good for networking and for sharing information on sustainability. As one external organization stated '*They certainly feed off each other. So the fact that there's a vehicle for trading information is very valuable' (External Organization A, Chief Executive Officer).*
It was also noted by Local Authority E, which was in the process of developing a sustainability reporting framework, that once developed, the reporting framework would be shared amongst the councils within the sustainability alliance of which they are members; '*we'd freely give them whatever information we can…. they can take whatever we do, whatever we find out, certainly with our blessing' (General Manager)*. Perhaps this is an avenue that should be pursued further to encourage and support local government sustainability reporting in local government in Australia.

8.4.2 Key Factors Leading to the Adoption of Sustainability Reporting in Local Government Authorities

The third research question examined what the key reasons were leading to the adoption of sustainability reporting within local government. The mail survey results found that

the up-take of sustainability reporting was being driven by two reasons: key leadership support from within the organization; and engagement with stakeholders. Further, when survey results were further examined, it was found that a higher percentage of respondents considered key leadership a more important factor in comparison to stakeholder engagement (Section 6.6.3).

With the mail survey highlighting the importance of these two reasons, interviewees were asked to consider the importance of these two reasons and which was considered more important in the up-take (or future up-take) of sustainability reporting. Of the thirteen local authorities interviewed, three did not clearly identify either or any reason that they considered important.

Of the ten authorities that did comment, results indicated that key leadership was considered most important by nine authorities with only one authority considering stakeholder engagement as most important. Of the nine authorities, differing levels of leadership were indicated as being the position from which support needs to commence (Table 8.9).

Table 8.9
Interviews - Level at which Key Leadership Support needs to Originate

Level	**Number**	**%**
Councillors	2	16.67
General Manager/CEO	4	33.33
Chief Financial Officer	2	16.67
Departmental Heads	1	8.33
Government	3	25.00
Total	12	100%

These results support the findings from the mail survey with 33.33% of interviewees considering that the General Manager/CEO was the position from which key leadership needs to originate. They further highlight the role of government with 25% of interviewees indicating the need for government to provide key leadership and support in

the establishment of sustainability reporting. These results, whilst small in number, are supported by the mail survey results where a combined 19.52% of respondents considered that government, either at State or Federal level, needs to provide key leadership support. Such a need for leadership support by government was highlighted by Local Authority E, who was in the process of establishing sustainability reporting through the leadership of the general manager and considered the difficulties facing local authorities and the need for State government leadership to drive the reporting process forward:

> *'But it is difficult, particularly for the smaller ones, but it's difficult enough for the larger ones. I think it's a lack of governance in the larger ones. Governance from a State perspective – giving us meaningful targets or good advice and perhaps funding where it's needed, that's not allowing this process to go forward. It's a shame that it relies on individual leadership in Councils' (Local Authority E - General Manager).*

Further, whilst Local Authority J, which was only reporting on sustainability through informal verbal processes at the time, considered that if local authorities themselves did not begin to report on sustainability, it would be imposed by government through mandated reporting requirements:

> *'I think, well we've got a government that's going to make us do it if we don't do it ourselves so I mean, it's going to happen*' (*Local Authority J - Finance Manager).*

Key leadership was also considered the key factor in the establishment of sustainability reporting by the three external organizations. They considered that local authorities required a 'politically savvy sustainability champion' to provide the necessary leadership required. In doing so, '*councils that have the support, and good leadership at that higher level, they find it easier to get things done*' (*External Organization A - Environmental Manager).*

Whilst the results support the need for leadership in the establishment of sustainability

reporting, two of the nine authorities did, however, highlight the need to engage with stakeholders but considered it more of a secondary factor in the establishment of sustainability reporting. This was discussed by Local Authority K (General Manager) who acknowledged that he provided the leadership to commence the process (in focusing on environmental sustainability) but through working with and involving the community, considers that the community members are now the driving force.

Only one urban authority considered that stakeholder engagement was important in the up-take of sustainability reporting, being Local Authority H, which stated:

> '*…the community has decided we need to put a lot more focus on sustainability and environmental sustainability…. So yeah, it's very much community driven' (Local Authority H - Sustainability Programs Coordinator).*

These results, whilst similar to the mail survey results, which found that a higher percentage of respondents considered key leadership as a more important factor in comparison to stakeholder engagement, highlighted a lower level of concern by interviewees in engaging with stakeholders. This was evidenced by such statements as:

> '*Geez, we're just really, really poor at that (informing and engaging stakeholders)' (Local Authority C - General Manager Corporate Services)*

> '*No, we certainly haven't really pushed for the engagement side of things… I think it's really minimal the requirement to engage with stakeholders' (Local Authority M - Environmental Coordinator).*

> *'Well, look, traditionally I don't think councillors are bothered with that (engagement with the community). They have sort of pretty much just gone with whatever the councillors want to deal with and the internal politics of that (Local Authority B - Manager Financial Services).*

These results are in contrast to the survey findings which found significant results (Section 6.6.2) in considering the importance of stakeholder engagement but support the findings from Pini and Haslam McKenzie (2006) who, whilst focusing solely on rural

authorities, found limited emphasis being placed on community engagement.

With the mail survey results focusing on the importance of particular external stakeholders in the establishment of sustainability reporting, respondents were asked to consider internal stakeholders and the importance of this group in the process of establishing sustainability reporting.

8.4.2.1 Importance of Internal Stakeholders

Mail survey results identified the importance of external stakeholder groups in the establishment of sustainability reporting by local government. Interviewees were asked to consider the importance of internal stakeholders, that is, their employees in the process. Farneti and Guthrie (2009), in conducting semi-structured interviews with a group of Australian public sector organizations, found that employees were regarded as an important stakeholder group in sustainability reporting.

Of the thirteen authorities, the majority of interviewees (from a total of eight that responded to the question) considered that the employees of the organization were of low importance in engaging with in terms of sustainability. As stated by Local Authority J, Finance Manager) '*The staff are here to provide advice to Council… they are specifically employed for that purpose*' and, therefore, it was considered, there would be little need to engage specifically with this group. This was a similar viewpoint shared across six of the eight authorities that commented on this issue. Of the remaining two authorities, one was actively engaging with their employees on sustainability issues (Local Authority K) whilst the other, conceded that whilst an important stakeholder group, they were yet to engage actively with their employees – '*we've kept them informed at this stage, up to a point, but they're not engaged*' *(Local Authority E – General Manager)*. Local Authority K, in commenting on the benefits of engaging with their employees, highlighted the change in culture within their organization, where it was thought that a sustainability culture now permeated the whole organization from councillor-level down.

8.4.3 Accountant's Role within Sustainability Reporting in Local Government Authorities

The fourth research question sought to examine and determine the level of involvement by accountants in sustainability reporting in local government. The mail survey results found that the environmental department was the most involved department in the preparation of sustainability information with 50.53% of reporting respondents utilizing accountants in the reporting process (Section 7.2.1 and 7.2.1).

Those interviewees that were reporting on sustainability or planning in the future to report on sustainability (both informal and formal) were asked to indicate in which department sustainability reports were/would be prepared with eleven authorities providing an answer to this question (Table 8.10).

Table 8.10
Interviews – Preparation of Sustainability Information (By Department)

Department	Number	%	Number Sustainability Team	% Sustainability Team	Total	Total %
Environmental Department	2	15.38	2	15.38	4	20
Sustainability Department	-	-	2	15.38	2	10
Finance Department	3	23.08	4	30.77	7	35
Strategic Planning Department	-	-	1	7.69	1	5
Corporate Planning Department	-	-	1	7.69	1	5
Other	-	-	3	23.09	3	15
Sustainability Reporting Team	6	46.16	-	-	-	
No response	2	15.38	-	-	2	10
Total	13	100%	13	100%	20	100%

The most utilized department was the finance department (23.08%) followed by the environmental department (15.38%). In similar findings to the mail survey, 46.16% of interviewees indicated that they used a sustainability reporting team consisting of two or more departments to prepare their organization's sustainability information.

These data were then further analyzed to determine which departments were included in the sustainability reporting teams. Of the six authorities that used reporting teams, five indicated that there were two departments involved with one indicating that there were three departments involved, providing a total of thirteen responses. When these responses were separated across the different categories, it was found that the finance department remained the most utilized department (35%) followed by the environmental department (20%). These results differ from the mail survey results which found that the environmental department was most utilized (32.31%), followed by the corporate planning department (25.38%) and finance department (24.61%).

However, as was highlighted by one of the external organizations in interview, sustainability positions are quite often drawn originally from environmental departments in local government[2]. Thus, whilst there is a name change, the perception and view of the department is focused on environmental sustainability. Therefore, for the two interview respondents that indicated that the sustainability department was being utilized (Table 8.10), further investigation was conducted to determine whether these departments were more a 'sustainability' or an 'environmental' department.

Of the two authorities, Local Authority A's sustainability officer position, situated in the sustainability department was setup approximately twelve months previously. The position was a merger of two positions – an environmental control officer and a sustainability officer and as stated by the Sustainability Coordinator, '*the role was created to be an environmental sustainability role*'. Whilst the sustainability coordinator

[2] This finding concurs with the findings from Dickinson *et al*. (2005) who found that sustainability reporting frequently commences in the environmental department until it gathers sufficient momentum to be integrated throughout the organization (p. 31).

had a vision of broadening the role in the future, at the present time, the role had a focus on environmental issues and environmental sustainability.

For the second local authority, Local Authority E, the position had again been setup recently, within the last two years. However, this position was created to develop a triple-bottom-line sustainability reporting approach which had now expanded to a quadruple-bottom-line approach (environmental, social, economic and governance). Therefore, based on this examination, of the two authorities, Local Authority A's position could possibly be considered more of an environmental department focus. As such, whilst this does not alter the results with the finance department still being the most utilized (35%), the environmental department utilization in sustainability reporting increases to 25%.

In further analyzing the data, testing was conducted to determine if there were any differences in responses by classification (urban or rural). There were no major differences noted between classifications, as indicated in Table 8.11.

Table 8.11
Interviews – Preparation of Sustainability Information (By Classification)

Department	Urban	%	Rural	%
Environmental Department	2	18.18	2	22.22
Sustainability Department	1	9.09	1	11.11
Finance Department	4	36.37	3	33.34
Strategic Planning Department	1	9.09	-	-
Corporate Planning Department	1	9.09	-	-
Other	1	9.09	2	22.22
No response	1	9.09	1	11.11
Total	11	100%	9	100%

Of those local authorities that were utilizing the finance department in their current or

future sustainability reporting processes, the role that the accountant plays within sustainability reporting was examined.

8.4.3.1 Role of the Accountant

Seven authorities had indicated that they used or planned to use the finance department in their sustainability reporting processes, from a total of eleven responses. That is, 63.64% of authorities involve the finance department and their accountants in the process of sustainability reporting whilst the remaining interviewees (36.36%) did not. Of the seven authorities, three authorities had based the actual development of triple/quadruple-bottom-line and sustainability reporting within their finance department. In each of these three cases, development involved providing the leadership and the key decision making in relation to sustainability reporting by the accountants within each respective finance department. Of the three councils, Local Authority E, in discussing why it was decided that the finance department would take key responsibility, stated:

> '*Well that's why, you know, we put it in the accounting department, cause everything that happens in the Council has to be paid for. Ultimately if you take, it's a mercenary view perhaps, but, and perhaps a crude view but ultimately it's paid for one way or another. And so from my perspective, whatever we are going to do has ultimately got to be within affordable, acceptable parameters… and that's where accounting comes in*' *(Local Authority E - General Manager).*

Of the three authorities, whilst they acknowledged the involvement of the finance department in providing leadership and key decision making, only two considered that sustainability reporting would in the long term be prepared by accountants within their organizations. The remaining authority (Local Authority F), whilst the establishment of sustainability reporting will be driven by the Corporate Services Department (Finance Department), ultimately, the reporting would be completed by a reporting team with their accountants/finance department being involved only in economic sustainability reporting.

Of the four remaining authorities, three considered that the finance department would have a leading role but only in economic sustainability. This was discussed by Local

Authority A (Financial Services Coordinator) – '*I think financial sustainability (reporting) would have to sit with us or if not, you know, we'd have to have a major input into it'*. The final authority considered that their finance departments/accountants role would be limited to that of financial information provider only:

> '*for the reporting, I wouldn't even attempt to do it. I'd just be providing the data … We wouldn't be involved with it any further because it just wouldn't be our field of expertise at all' (Local Authority D - Finance Manager).*

Interview respondents were asked to consider what is restricting accountants becoming more involved in sustainability reporting within their organization in the future.

8.4.3.2 Restrictions on Accountants

Six local authorities commented on what is perceived to be restricting accountants in enabling them to be more involved in sustainability reporting. A number of restrictions were discussed by interviewees that have been highlighted previously in both the mail survey findings and interviewee findings in relation to restrictions on sustainability reporting in local government as a whole. However, there were a small number of additional reasons that were provided that specifically focused on restrictions of accountants in the sustainability reporting process.

Three authorities considered that the accountant's approach and mind-set at times can be quite restricting in that the accountants consider themselves just '*number crunchers*' with little strategic or long-term vision but rather just focused on day-to-day issues. A further authority, considered the economic focus of accountants is restricting them being more involved in sustainability reporting. For example, Local Authority A (Sustainability Manager) in commenting on the perceived viewpoint of the accountant in their organization - '*so in terms of sustainability, I guess his impression is still this greenie environmental thing*' in relation to environmental sustainability. This point was further emphasized by the Financial Services Coordinator of Local Authority A, in that accountant's skills and training need to be developed in relation to environmental and social areas of sustainability reporting to ensure accountants have more of an

understanding of these issues. This finding generally concurs with that of Ball (2002) who, in investigating a local government organization, found that whilst accountants were broadly supportive of sustainability reporting, they considered that such reporting should not involve them and should be kept separate from financial reporting.

Additional training and up-skilling was considered important by two of the authorities, as highlighted by Local Authority J:

> *'I don't think anyone has the necessary skills because we haven't seen what is required of us (a formal reporting framework). That said, I think that my team, would certainly adapt to it……I think you know, like most things, it'll probably be done poorly initially with the view of becoming good over a period of time. And you know, the GST is a classic example of that' (Local Authority J – Finance Manager).*

In commenting on this issue, the external organizations spoke of the need to have accountants involved in the sustainability reporting process to provide the reporting expertise. However, they considered that accountants themselves at the moment are unsure how sustainability reporting relates to them. One external organization commented '*The impression I get is that accountants don't want anything to do with it. They're saying it's nothing to do with us' (External Organization A – Environmental Manager).* Further, it was considered that such reporting is so far out of the accountant's sphere of reference that they are yet to understand how it relates to them. However, it was commented that the professional accounting bodies in Australia are aware of this issue and, therefore, more resources would probably be available in the future to ensure accountants understand the reporting requirements and to acquire the necessary skills.

These results concur both with the results from the mail survey in that lack of expertise was found to be the most commonly cited reason in explaining why accountants are not being used in the sustainability reporting process (Section 7.2.5). Further, the results concur with Burritt *et al.* (2009) who considered the absence of education, training, knowledge and experience in accounting personnel acts as an impediment to sustainability accounting.

8.4.4 Sustainability Frameworks Being Utilized by Local Government Authorities

The fifth research question sought to examine sustainability frameworks currently being utilized by local government authorities in Australia. The mail survey results found an array of reporting frameworks being utilized. It had been expected that the dominant framework would be the GRI; however, the survey results did not support this expectation with few authorities having heard of the guidelines (twenty-six) with even less utilizing the framework (eight). It was further found that there was a lack of consistency in the definition of sustainable development being utilized in local governments to guide the preparation of their sustainability reporting.

Interview respondents were asked to indicate if they were utilizing or referring to a reporting framework in the preparation of their sustainability information. Of those authorities that considered they were reporting on sustainability (twelve), not one was currently utilizing any developed reporting framework. Only one was in the process of developing an in-house framework (Local Authority E), whilst another was currently reviewing available reporting frameworks (Local Authority A).

With the lack of usage of the GRI (or PASS) framework by mail survey respondents, interviewees were asked why this might be the case. However, only two interviewee respondents had heard of the guidelines (Local Authority A and E). Whilst the sustainability coordinator from Local Authority A indicated that the preferred guideline for their organization would be the GRI guidelines, when this framework was discussed with the sustainability reporting team, it was found '*there was not a lot of support for it but I think it was because hardly anyone had heard of the model' (Local Authority A - Sustainability Coordinato*r). In further discussing different frameworks with Local Authority A, it was noted that a number of different frameworks had been reviewed by the organization as to their suitability but they were all found to be too advanced in terms of complexity and understandability for the authority's sustainability reporting team. Such frameworks included ISO 14000 and the TBL Reporting Kit (as developed by the City of Melbourne and ICLEI).

In discussing the low usage of the GRI framework with the external organizations, it was

highlighted that a number of issues could possibly be involved - including the fact that the GRI guidelines were initially developed for the private sector. Whilst sector supplements have since been developed including the PASS with its focus on the government sector, the perception appears to be that it still is a private sector guideline which may have a bearing on the lack of knowledge by interviewees of the guidelines. Further, the external organizations considered that the complexity and the sheer volume of the guidelines could be an issue for local government as a whole.

The two authorities that were in the process of developing or reviewing available frameworks (Local Authority A & E) were asked to indicate if they had determined which sustainability elements they would report on as part of a formal reporting framework. Both organizations were yet to decide. With Local Authority E in the process of developing a framework, some initial thinking had gone into specific reporting elements with a focus on quantifiable key performance indicators (KPIs). The conclusion was that whichever KPI's are chosen, they needed to be:

> '*simple, not too many of them*', '*meaningful, that you have to strive to achieve against and that do make a worthwhile contribution to sustainability'*, and understandable - '*we've got to convert that data into understandable language for everybody*' *(Manager Financial Services).*

This was further raised by the General Manager of Local Authority E:

> '*it's got to be kept absolutely simple, in tangible form so that the public, if you're going to have any success, so that the public can recognize and understand them…. If they can't understand it out there, I can guarantee you we can't understand it in here. And that indeed is part of the problem once it gets too technically based'.*

Interviewees were asked if they had defined the term 'sustainable development' within their organization.

8.4.4.1 Definition of Sustainable Development

The mail survey highlighted a lack of consistency in how local government authorities were defining the term 'sustainable development' (Section 7.3.8). Interviewees were asked to indicate if their organization had defined the term and, if so, was there a specific focus of the definition.

Of the thirteen respondents, twelve responded to the question with a mixture of responses. These responses were cross-checked against each organization's web-site for accuracy, to determine, for example, where an interviewee stated that there was no organizational definition but on the web-site there was a clear definition provided for sustainable development. From this process, two differences were found with final results provided in Table 8.12.

Table 8.12
Interviews – Development of Definition for Sustainable Development

Definition for Sustainable Development	**Number**	**%**
No Definition	3	23.08
Definition developed	8	61.54
Currently in the process of developing a definition	1	7.69
No response provided	1	7.69
Total	**13**	**100%**
Authorities that had Developed a Definition - Type of Definition		
Integrated Focus	4	50
Environmental Focus	2	25
Social Focus	1	12.50
Economic Focus	2	25

The majority of respondents had either developed or were in the process of developing a definition for sustainable development (69.23%). There appeared, though, to be a lack of knowledge in how the chosen definition was initially developed with interviewees generally not being aware of the specifics of the development of the definition or having an understanding of the importance of developing and defining such terms. As for the

one authority that had indicated that they were in the process of developing a definition (Local Authority J), it was considered that the definition would be developed through the use of a consultant and generally '*relying on the definition of others'*. However, by following this approach, this could possibly lead to non-acceptance by staff of sustainable development within their organization and ultimately lack of change in culture[3].

Of those authorities that had developed a definition, 50% (four respondents) were utilizing a definition with an integrated focus that encompassed environmental, social and economic components whilst the remaining four authorities were utilizing a definition of sustainable development that primarily focused on either environmental and/or economic components. It was encouraging to note, though, that two of these respondents were either in the process or had future plans further to develop their organization's definition of sustainable development to incorporate all three components of sustainability.

The need for organizations to define initially what sustainable development means to their organization was considered important by one of the external organizations interviewed. It was felt that, as the term can mean different things to different people, it needs to be defined from an organizational point of view so that all understand and appreciate the focus of sustainable development for their particular local authority.

As previously indicated, included within the organizations that had developed a definition, were two that, in the interview process, had indicated that no definition had been developed for their organization. However, when each organization's web-site was examined, differing results were found with both organizations providing a definition on sustainable development that encompassed environmental, social and economic components. This, perhaps, highlights an issue that whilst the organization may provide a theoretical basis for sustainable development, such a basis may not be played out in the everyday management of the authority and, thus, is not instilled within the culture of the organization[4]. This was highlighted by one of the respondent's comments:

[3] See Section 8.4.1.5 – Culture of the organization was previously discussed as a barrier to reporting on sustainability.
[4] Ibid.

> '*I think they (the council) sort of promote the idea of the triple-bottom-line but they don't really practice it as such' (Local Authority M – Environmental Manager).*

In further examining the type of reporting these two authorities were engaging in, both only reported on sustainability through informal processes. This lack of reporting perhaps may be due to the need to instill such thinking within the culture of the organization. This is an issue that needs further research and investigation.

Respondents were asked to consider if local government is in need of a reporting framework that is tailored to their sector.

8.4.4.2 A Reporting Framework for the Local Government Sector

Of the thirteen local authorities interviewed, only one authority did not comment on the issue of whether local government is in need of a specific reporting framework. Of the twelve reporting authorities, all indicated that there is a need for a reporting framework specific to local government in Australia. Twelve reasons were put forward as to why such a framework was required (Table 8.13). The most important reason emphasized the current situation of each individual authority having to 're-invent the wheel' in developing sustainability reporting within their organization due to lack of specific guidelines to follow (33.30%). This was discussed by Local Authority I:

> '*It would be good to have a framework (specific to local government). So you wouldn't have to reinvent the wheel for every council and if all that thinking is done for you and you can put it in place, it's a lot easier isn't*?' *(Manager Corporate Services).*

Table 8.13
Interviews – Need for a Reporting Framework in Local Government

Reason	Number	%
Are Essentially all in the Same Business	3	25
To Demonstrate Sustainability to Government	1	8.30
Lack of Direction from Government Organizations	2	16.70
Lack of Comparability	2	16.70
The Need to 'Re-invent the Wheel'	4	33.30
Total	12	100%

The second major reason put forward for a reporting framework was that all authorities are essentially in the same business of providing goods and services to their municipality (25%), as discussed by Local Authority C:

> '*I think that would be fantastic (development of a reporting framework) and … look our business really is the same as the other 78 councils in Victoria, so, and the 500 odd in Australia and so you know, why would we do anything different' (General Manager Corporate Services).*

Lack of current direction from State government and/or municipal organizations was also cited by two respondents along with the issue of non-comparability between authorities:

> '*But at some point there has to be, there has to be a methodology which I think is relevant to have common. The difficulty is, and if you pick a group of accountants, get 4 accountants in a room, you'll get 5 opinions, you know, … so trying to get common position is really difficult*' *(Local Authority B - Manager Financial Services).*

One final issue was raised by Local Authority F (Director Corporate & Community Services), being the need for a framework so that local government can commence reporting to demonstrate sustainability and efficiency to State government authorities:

> '*rightly or wrongly, councils are the whipping boy of State governments and State*

governments from time to time seem to take great delight in holding local government up as being an inefficient arm of government and we're going to pull them into line … So I think it's important for local government, that we start to measure some things to say that, no that's not true, we are efficient, we are sustainable …'.

Interviewees that indicated the need for such a framework were asked to consider whether it should be a mandatory framework. Of the twelve respondents, seven considered that such a framework should be mandatory, three either were unsure or did not express an opinion with one authority disagreeing that a reporting framework should be mandatory. Views supportive of mandatory reporting were quite similar in opinion to those expressed by Local Authority C (General Manager Corporate Services); '*you won't get most people doing it unless you do that (mandatory reporting)*'.

However, would mandatory reporting solve the issue of reporting on sustainability for local government? Included within the authorities supportive of a sustainability reporting framework were the three NSW authorities that have mandatory SoE reporting and mandatory Integrated Planning and Reporting Framework requirements. Their view of the present mandated requirements and the possibility of future mandated requirements for sustainability reporting is now considered.

8.4.4.3 Mandated Reporting for Sustainability

Of the twelve respondents reporting on sustainability, three were from NSW (one urban and two rural) where there are mandated requirements for SoE reporting and the Integrated Planning and Reporting Framework[5].

One authority was supportive of mandated reporting requirements for sustainability, one was unsure whilst the third considered it should be voluntary. Authority E, in stating that the framework should be mandated, asserted:

'*Yes, it should be mandated - voluntary alliances, amalgamations, co-operatives,*

[5] To be introduced over a three year period commencing from 30 June 2010

whatever you want to call them, don't work... So most assuredly, it's got to be national, it's got be coordinated, it should be designed by government and mandated' (Local Authority E - General Manager)

Local Authority F was not as forthright in considering whether sustainability reporting should be mandated. It was considered that whilst it could be voluntary from a legislative process, the community would perceive the report as an important mandatory document and thus, it would ultimately become a mandatory report required by the community. As the Director, Corporate and Community stated:

'*So I think in the end it probably will be mandatory …. I think the time has come where these sorts of things are going to be driven out of the community consultation process (rather than from mandatory legislation)*'.

The third authority, Local Authority K, in rejecting mandatory reporting, considered such a report would just become a 'door-stop' in similar fashion to the other current mandated reporting requirements in NSW. Each of the three local authorities was asked their views of the current mandated reporting requirements in place in NSW and all were of a similar opinion. They considered that the SoE report was more of a '*compliance thing'* in that it was more of a '*just tick the box'* report to meet State government legislative requirements. When asked of their views on the Integrated Planning and Reporting Framework, if this too, would simply become a compliance report, it was stated by Local Authority E (urban authority):

'*Well, that's in the hands of the department (State government). If they just tick the box and put it to one side, and in other words they've ticked the box marked sustainability, therefore ipso facto, NSW is sustainable, as long as everyone puts in a report and then they'll move onto their next calamity' (General Manager).*

A further point was raised by Local Authority K (General Manager). Whilst considering that the Integrated Planning and Reporting Framework was a good thing, the General Manager believed that there were limitations with the framework being mandated '*Because they're (State government) telling us what it should be, it doesn't give us the*

flexibility to be localized' (Local Authority K - General Manager).

Whilst there were differences in opinion of mandated reporting requirements between the three NSW authorities, it was evident that there was a heightened level of awareness of sustainability and sustainability reporting amongst the authorities, which generally concurs with the mail survey findings (Section 6.4.4). For the urban authority, they were actively in the process of developing a reporting framework whilst, for the two rural authorities, one was positively aware and actively trying to develop reporting processes whilst the other had an awareness of sustainability with detailed knowledge of the issues involved.

This perception was further supported by one of the external organizations in stating that NSW local governments are more advanced in terms of sustainability planning and reporting. It was suggested that this may have been due to the on-going training and funding that has been provided over a number of years by State government and local government associations with the introduction of the impending mandatory Integrated Planning and Reporting Framework. Perhaps, therefore, this heightened level of awareness in sustainability reporting has been brought about by the mandatory reporting requirements in NSW. This is an issue that needs further research and investigation.

8.5 Summary

The responses to the questions that were raised in the interviews have been analyzed. Such questions surrounded the extent of reporting on sustainability in local government, the key reasons leading to the adoption of sustainability reporting, the level of involvement by accountants and sustainability frameworks being utilized by local government.

The next chapter provides the discussion of the findings, from Chapters 6, 7 and this chapter together with conclusions which incorporate the development of a broad reporting framework for local government.

Chapter 9 Discussion and Conclusion

9.1 Introduction

This chapter provides an overview of the results of this study discussed in the context of the research questions posed and the individual hypotheses. A reporting framework specific to local government authorities is then developed and discussed.

9.2 Sustainability Reporting by Local Government Authorities

Sustainability reporting in the public sector is seen as an emerging field. Ball (2007, 2006b, 2005, 2004a, 2002) and Ball and Seal (2005), in focusing on the local government sector, highlighted that there is much potential in its further development towards a sustainable development agenda. This exploratory research has sought to respond to calls by Ball and Grubnic (2007) and Ball (2004b) for research contributions of a practical and fundamental nature in asking the research question – 'Are local government authorities in Australia reporting on sustainability?'. In doing so, this study has contributed towards an understanding of sustainability reporting within the public sector with a specific focus on local government. It has also added to the further development of the theoretical underpinnings within public sector research as a whole, argued to be currently lacking in the research literature today.

The results for each of the individual hypotheses posed in this study will now be discussed in terms of the communication process. By viewing sustainability reporting from a communication perspective, it helps to identify possible issues in the reporting process that might need to be rectified in the interests of the advancement of the sustainability reporting agenda in the local government sector.

9.2.1 Results of Hypotheses

The first research question sought to determine if local government authorities were reporting on sustainability in Australia. In doing so, the research question was focused on the communication message. In particular, to what extent is a sustainability reporting message being produced and communicated by local government authorities; what is the nature of the media channel used to transmit this communication message to engage stakeholders and what is the focus of the message

produced. Three hypotheses were subsequently developed to examine this research question.

9.2.2 Hypothesis 1 (H1): Sustainability reporting is undertaken by local government organizations in Australia.

Hypothesis 1 sought to examine if local government authorities were reporting on sustainability. It was expected that, even if reporting appears to be at a minimum, local governments do report on sustainability. The mail survey results supported this expectation, with 50% of respondents (from a total of 190 respondents) indicating that they reported voluntary sustainability information. The highest level of sustainability reporting undertaken by local authorities was social reporting with 90.53% of respondents reporting on social information[1]. These results are interesting when viewed against comments from Burritt *et al*. (2009 p.9) who considered that attention to accounting for social issues is not an established practice (from the viewpoint of the public sector in general) and, as a consequence, the social accounting pillar in sustainability accounting is underutilized. Perhaps the local government sector is an anomaly to this general trend in public sector reporting? This is an issue that needs further examination to determine if social accounting is as widely reported in local government as these survey results suggest.

The survey results were supported by the interview results with 92.31% of the interviewees considering themselves to be reporting on sustainability in some manner with only one interviewee considering that they do not. Further analysis of the interview results found that a combination of formal and informal reporting mechanisms were being utilized by authorities in reporting on sustainability[2]. These results therefore indicate that local authorities in Australia are reporting on sustainability, that is, they are in effect, producing a communication message. Thus, Hypothesis 1 is supported.

[1] That is, either reporting on its own or in combination with one other or two other reporting components.
[2] Informal reporting for the purposes of this research included verbal internal/external reporting and/or ad hoc minor reporting of sustainability information with no formal reporting processes in place.

9.2.3 *Hypothesis 2 (H2): There is no consistency in the choice of media used to report sustainability information across the local government sector in Australia.*

Hypothesis 2 sought to determine if the choice of media to report on sustainability information was consistent across the local government sector. This hypothesis focused on the media channel being utilized to transmit the communication message from the preparer to the stakeholder. It was anticipated that consistency in the choice of media adopted would not be found with individual local authorities using a mixture of reporting media.

From an analysis of the mail survey results, an array of different reporting media was being utilized with the most utilized medium being the annual report (94.74% of respondents were utilizing it). The interview results supported the mail survey results by indicating that of the five authorities engaged in formal reporting processes, the most utilized report was the annual report. For the nine authorities utilizing informal reporting processes, a mixture of reporting media was being utilized with external verbal reporting and management reports being used the most. Consistent with the mail survey results, when all local authority reporting methods were compared for interviewees, a range of reporting media was found to be utilized in communicating sustainability information to stakeholders.

These results provide preliminary support for Hypothesis 2 indicating a mixture of reporting media has been utilized by local government. Further testing was conducted on the mail survey results by the type of reporter; that is, integrated reporters and non-integrated reporters. Significant differences were found in the usage of the seven different reporting media[3] for sustainability reporting purposes with integrated reporters found to utilize these types of media more than non-integrated reporters.

This suggests that consistency may be being achieved in a small way across the two types of reporters in the choice of where sustainability information is being reported, with integrated reporters favouring certain types of media in comparison to non-integrated reporters. However, from a communication perspective, these results indicate that whilst there may be some minor consistencies, overall there appears to be

[3] Reporting media included stand-alone sustainability reports, annual reports, SoE reports, budget statements, key performance indicator reports, the web-site and management reports.

no clear communication channel being utilized in the reporting process. Rather, the reporting message is being transmitted through a range of reporting media by local authorities today. This is an area that requires further research.

9.2.4 Hypothesis 3 (H3): The focus of reporting across the local government sector in Australia is an integrated approach, focusing on environmental, social and economic factors.

Hypothesis 3 sought to determine the focus of the reporting message being produced by local government authorities, whether it be a reporting message focusing on environmental, social, economic or on integrative sustainability reporting. With prior research indicating an emphasis on environmental sustainability reporting, three additional hypotheses were posed to reflect each of the dimensions of sustainability reporting. These three additional hypotheses were as follows.

H3A: The focus of reporting across the local government sector in Australia is environmental sustainability.

H3B: The focus of reporting across the local government sector in Australia is social sustainability.

H3C: The focus of reporting across the local government sector in Australia is economic sustainability.

In an analysis of the mail survey results, it was found that the traditional economic focus was considered slightly more important by respondents in comparison to the other reporting approaches to sustainability (being social, environmental and integrated reporting). However, these results are mixed when compared against the actual type of sustainability reporting respondents are engaging in. Results indicated that the highest level of sustainability reporting was social reporting with 90.53% of reporting respondents reporting on social information (that is, either reporting on its own or in combination with one other or two other reporting elements) with integrated reporting being utilized the least (69.47%). Perhaps, whilst respondents may be engaging in more social reporting than other approaches, respondents still consider the traditional economic focus as the most important.

Interestingly, the results of local authority interviews differed from the mail survey results. Results indicated that the highest level of reporting was economic reporting (66.67%), followed by environmental reporting (50%) and social reporting (8.33%) with no interviewees indicating that they are currently utilizing a fully integrated reporting approach. It appears from these interview results, sustainability reporting is very much an emerging field in local government with reporting still firmly focused on economic matters. These results concur with the study by Dollery *et al.* (2006) who highlighted the excessive emphasis that has been placed on economic sustainability at the local government level.

With differing results being found, in that the mail survey results provide support for hypotheses, H3B and H3C, whilst the interview results provide support for hypothesis, H3C, it is therefore concluded, there is inconclusive support for Hypothesis 3. These results indicate that there is no clear focus of communication message currently being prepared by local authorities in Australia. A possible reason for this, as explained by Lamprinidi and Kubo (2008), is the lack of a coordinated sustainability reporting framework across the public sector. With no reporting framework to provide guidance and direction, the communication reporting message in the local government sector is being hindered by the lack of a clear reporting process and focus.

9.2.5 Summary

The results from Hypothesis 1-3 highlight from a communication perspective that local government authorities in Australia are producing a sustainability reporting communication message. However, findings indicate that currently there are gaps in the communication process with no clear communication channel being utilized to transfer this message. Results further indicate that there is a lack of consistency in the focus of the message being produced with economic reporting still having a firm focus whilst the integrated approach is the least utilized reporting method by local authorities. These results highlight that there is uncertainty and a lack of clarity in the sustainability communication message being produced and transmitted within the local government sector today.

9.3 Differences in the level of Sustainability Reporting in Urban and Rural Local Government Authorities

The second research question assessed whether there were any differences in the reporting levels of urban and rural local government authorities in Australia. In doing so, the focus was on the type of local authority preparing the communication message. One hypothesis was developed to examine this research question.

9.3.1 Hypothesis 4 (H4): There will be a significant difference in the levels of sustainability reporting between urban and rural local government authorities in Australia.

With no known studies having examined this issue, prior studies that have focused on the development and implementation of LA21 processes were examined (Pini *et al.* 2007; Bajracharya and Khan 2004; Kupke 1996). These studies highlighted differences in the level of adoption of LA21 between urban and rural councils, with urban councils more likely to engage in LA21 activities than rural councils. Thus, it was anticipated that a significant difference would be found in reporting levels between urban and rural local authorities.

In an analysis of the mail survey results, 66.29% of urban respondents indicated that they were reporting voluntary sustainability information with 35.64% of rural respondents doing likewise, with independent group t-testing highlighting the results are significant at the 0.001 level. Interview results indicated higher levels of reporting by both urban and rural respondents in that all urban respondents and 83.33% of rural respondents considered themselves to be reporting on sustainability. With respondents indicating that they utilized both formal and informal reporting means, results were further examined from a formal reporting basis. In doing so, the results indicated that 44.44% of urban respondents and 20% of rural respondents were reporting utilizing formal reporting mechanisms. However, it was highlighted by one interviewee that in rural authorities, informal reporting approaches were more critical than formal reporting processes, through indirect verbal communication with their stakeholders and by energizing individuals within their community.

The mail survey results therefore indicate that there is a significant difference in reporting levels between urban and rural local authorities with the interview results

further supporting these findings. In attempting to provide an explanation for this, rural authorities emphasized a lack of funding, lack of expertise and knowledge, and a lack of infrastructure in comparison to urban authorities when asked what was restricting or preventing sustainability reporting within their organization[4]. The interview results emphasized a lack of support from within the organization; with urban authorities citing lack of support from senior management whilst urban authorities cited lack of support from councillors.

These results provide support for Hypothesis 4. However, from a communication perspective, these results highlight the lack of a clear approach to reporting in urban and rural authorities with differences emphasized in who is reporting and the type of reporting being conducted, whether it be formal or informal reporting.

9.4 Key Factors Leading to the Adoption of Sustainability Reporting in Local Government Authorities

The third research question focused on the key factors that are driving the commencement of the sustainability reporting communication process in local government authorities in Australia. In doing so, it is important to highlight the processes that need to be put in place to provide for the development of a clear communication message for the local government sector.

Two hypotheses were developed to examine this research question.

9.4.1 Hypothesis 5 (H5): Key leadership support is necessary in order to drive the establishment of sustainability reporting.

Hypothesis 5 examined the influence of key leadership support. It was expected, based on prior research, that the key internal factor driving sustainability reporting within the local authority is key leadership support. Mail survey results supported this expectation with 89.47% of respondents considering that such support was important to very important in the establishment of sustainability reporting practices, significant at the .001 level (t=12.251). A range of leadership levels were highlighted with the general manager/CEO being the favoured key leadership position[5], with 27.24% of respondents indicating that this was the position from which key leadership support

[4] Refer Section 6.5.5 for details.
[5] Mail survey respondents were provided with seven levels of key leadership. Refer Section 6.6.1 for details.

needs to originate.

The survey results were supported by the interview results with nine authorities (from a total of ten responding authorities) and all three external organizations highlighting the importance of key leadership. Again, a number of differing levels of leadership were highlighted with the position of general manager/CEO indicated by 33.33% of authorities as being the favoured position from which key leadership support needs to originate. These results, in supporting Hypothesis 5, highlight the importance of key leadership support in the establishment of the sustainability reporting communication process. However, they also highlight the lack of a clearly defined dominant position from which local authorities consider support needs to commence from. Whilst both mail survey and interviewee respondents indicated the importance of the general manager/CEO position, a range of other positions were also highlighted by the respondents. Without a clearly defined position to provide leadership in the development of the sustainability message, this can lead to the lack of a focused and concentrated approach in the development of the sustainability reporting process.

9.4.2 Hypothesis 6 (H6): Stakeholder engagement is critical to the successful establishment of sustainability reporting in local government.

Hypothesis 6 addressed the importance of stakeholder engagement in the establishment of sustainability reporting. In doing so, this hypothesis focused on the relationship between the preparer of the message and the receivers of the message, the stakeholders. As Bedford and Baladouni (1962) point out, concern with the needs of the destination should be a guiding principal for the accountant in the communication process.

It was expected that engagement with stakeholders would be the key external driver in establishing sustainability reporting for local government organizations. In an analysis of the mail survey results, 81.05% of respondents considered that stakeholder engagement was important to very important, significant at the .001 level ($t=11.632$). When asked to indicate which external stakeholder groups were important to engage with in the establishment of sustainability reporting, respondents considered that residents ($t=14.090$, $p<.001$), community interest groups ($t=9.886$, $p<.001$) and businesses ($t=4.045$, $p<.001$) were the most significant groups.

However, different results were obtained from the interview process. From a total of ten responding authorities, only one considered stakeholder engagement as important, whilst another two highlighted the need to engage with stakeholders but considered it more of a secondary factor in the establishment of sustainability reporting. Thus, there appears to be limited support amongst interviewee respondents for external stakeholder engagement. But perhaps there are different levels of stakeholder engagement. This was highlighted in the research of Pini and Haslam McKenzie (2006) who found limited emphasis being placed on stakeholder engagement by rural local authorities. A key reason put forward for this lack of engagement by respondents was that councillors have an intimate knowledge of their constituents' interests and concerns due to the small population in rural areas. With results from this current study highlighting that interviewee respondents are engaging in more informal reporting than formal reporting[6], stakeholder engagement may be occurring but through less formalized and indirect methods of engagement. This is an area that requires further investigation.

In considering the interview results from this present study, it must be remembered that the sample size was quite small (thirteen authorities with ten providing a response to this question) in comparison to the mail survey (from a total of ninety-five reporting authorities). Therefore, whilst it is recommended that further research be conducted, strong support for Hypothesis 6 was found from the survey results; thus Hypothesis 6 is supported. These results highlight the importance of stakeholder engagement as a necessary step in the development of a clear communication message. However, they also highlight from the interview results uncertainty about the nature of the stakeholder engagement process for local authorities engaged in the reporting process.

9.4.3 Summary

The third research question in seeking to determine the factors driving the establishment of the sustainability reporting communication process found that key leadership and engagement with stakeholders to be important factors in the process. However, the results also highlighted the lack of a clearly defined position from which leadership needs to commence and a level of uncertainly in the stakeholder

[6] Refer Section 8.4.1.1 for details.

engagement process. These uncertainties lead to the lack of a clearly defined process in the development of the communication message and need further clarification.

9.5 Accountant's Role within Sustainability Reporting in Local Government Authorities

The fourth research question examined whether accountants were being included as part of the sustainability reporting process by local government authorities in Australia. In doing so, the focus was to identify who was involved in the preparation of the communication message and, the involvement of accountants in the process. One hypothesis was developed to examine this research question.

9.5.1 Hypothesis 7 (H7): Accountants are not being utilized in the sustainability reporting process by local government authorities in Australia.

Based on prior research, it was anticipated that accountants would have limited involvement in the sustainability reporting process. However, in an analysis of the mail survey results, 50.53% of local authority respondents that prepare voluntary sustainability information indicated that they do utilize accountants with 48.42% of respondents indicating they do not[7]. For those authorities utilizing accountants, a number of roles was considered significant by respondents, with the most significant roles being that of financial information provider ($t=17.586$, $p<.001$) and providing assistance in financial costings ($t=17.103$, $p<.001$).

Similar results were found in the interview process with 63.64% of local authority respondents (seven) utilizing accountants in their current or planned future sustainability processes. Three of these authorities indicated that accountants would be involved in providing the initial leadership and key decision making required for the development of sustainability reporting but only two considered that sustainability reports would in the long term be prepared by accountants. The remaining authority, along with the four other authorities that utilized accountants, considered that the role of accountants would be limited to involvement in economic sustainability reporting. With the inclusion of accountants as key leaders in the initial developmental processes by three local authorities, there is acknowledgment of the expertise accountants can bring to sustainability reporting. However, it also highlights a perceived lack of

[7] Remaining respondents (1.05%) did not provide a response.

appropriate skills in accountants by local authorities in their lack of long term involvement in the sustainability reporting process.

These results draw attention to a number of limitations in the use of accountants in the sustainability reporting process with lack of expertise, training, knowledge and the mind-set of accountants themselves highlighted in this study as being major factors in holding them back from being more involved in the process. Therefore, whilst Hypothesis 7 is not supported, in that accountants are being utilized in the communication sustainability reporting process, their role is currently being limited in this process.

These limitations highlight what would appear to be an important issue in the accounting communication process, or in fact, in the sustainability reporting process. With results from Hypothesis 1-6 indicating uncertainty and lack of clarity in the communication message being produced, this seemingly has led to uncertainty in who is best placed to produce the message. Accountants have key skills and competencies that could be utilized in the sustainability reporting process; however their use is being limited by a perceived lack of appropriate skills in this area of accounting. Thus, the results from Hypothesis 7 suggest that the lack of a clearly defined sustainability reporting message in local authorities is causing a number of issues in the communication process including as to who should be involved in the preparation of the sustainability reporting message.

9.6 Sustainability Reporting Frameworks being utilized in Local Government Authorities

Reporting frameworks being utilized by local government in Australia were examined in the fifth research question. A common reporting framework used by local authorities would help to provide for clarity and uniformity in the sustainability reporting communication process. This research question focused on the available guidance provided to preparers in the preparation of sustainability information by local authorities. In particular, focus was on the usage of the GRI reporting framework, the reporting elements and the definition of sustainable development being utilized by local authorities.

Four hypotheses were subsequently developed to examine this research question. The

results are now discussed in relation to each of the hypotheses.

9.6.1 Hypothesis 8 (H8): Local government organizations in Australia utilize the GRI framework in their sustainability reporting practices.

Based on prior international research, it was expected that the dominant framework being utilized in local government would be the GRI framework. However, mail survey results differed from this expectation with only 27% of reporting respondents having heard of the framework with even fewer respondents having heard of the PASS (15.8%). Even fewer respondents were actually utilizing the frameworks; five were utilizing both the GRI and PASS with three utilizing the GRI exclusively[8]. On further investigation, it was found that a range of reporting frameworks were being utilized other than the GRI or PASS, with a number of authorities indicating that they were using a combination of frameworks. This finding whilst highlighting the low usage of the GRI and PASS frameworks, does suggest that perhaps local authorities are starting to think seriously about how to report on sustainability.

The interview results support the survey results in that not one of the local authorities interviewed were utilizing either the GRI or PASS frameworks. Of these authorities, only two had actually heard of the GRI or PASS with one (Local Authority A) indicating that whilst the GRI would have been their preferred framework, there was not a lot of support for it as very few people in their sustainability team had heard of the guidelines. These results suggest a possible communication issue at both the local government level but also at higher levels, such as the GRI itself. With a lack of knowledge of the GRI and the PASS, how can local authorities be expected to be using these frameworks?

Results indicate that both the GRI and PASS guidelines are being utilized by very few local authorities in Australia; thus, Hypothesis 8 is not supported. It further indicates that there does not appear to be a dominant framework being utilized in the reporting communication process by local authorities. With a range of reporting frameworks being utilized by mail survey respondents and interview results highlighting the current lack of usage of any developed reporting framework, this then brings into

[8] This equates to 4.2% of all mail survey respondents were utilizing either the GRI and/or PASS.

question the sustainability reporting message being produced by local authorities. With no dominant reporting approach prevailing, little guidance is currently being provided to the sector which can ultimately lead to unreliable and inconsistent reporting of the sustainability message amongst authorities.

9.6.2 Hypothesis 9 (H9): There is no consistent core of reporting elements that are being used in sustainability reporting by the local government sector in Australia.

Based on prior research it was anticipated that there would be no consistent core of reporting elements being utilized in sustainability reporting in local government. In doing so, from a communication reporting perspective, this would highlight the current lack of clarity and available reporting guidance for preparers in preparing sustainability reports in the local government sector. The mail survey results, however, indicated that of the forty-three reporting elements identified in the GRI and PASS, forty were found to be important (significant at the .001 level) by respondents. Whilst it, therefore, appears that local authorities are not utilizing the GRI/PASS frameworks (see Hypothesis 8), the majority of reporting elements identified in these frameworks were considered important by respondents. This finding suggests that respondents may be actually reporting on these reporting elements but are just not aware that they are utilizing GRI/PASS reporting elements, thereby creating consistency through the use of the GRI/PASS reporting elements. It was intended that further analyses of this issue be undertaken in the interview stage. However, with only two of the local authorities in the process of either developing or reviewing available reporting frameworks, neither had yet determined which specific sustainability elements they would report on as part of a formal reporting framework. Further research is required to consider the issue of reporting elements from a communication perspective.

9.6.3 Hypothesis 10 (H10): The GRI reporting framework is not specific to the needs of the local government sector in Australia.

In focusing on the adequacy of current reporting frameworks for local government authorities, it was expected that the GRI framework would not be specific to the needs of local government. However, of the mail survey respondents that utilized the

GRI/PASS guidelines, they did not consider this to be an influencing factor in restricting the use of either or both of the guidelines (z=.565, p>.05). Further, the respondents that had heard of the guidelines but did not utilize them did not consider such a factor to be an issue in helping to explain why they did not use either or both guidelines (z=.540, p>.05). Rather, the only significant reason in helping to explain why authorities do not utilize the GRI/PASS guidelines was found to be lack of resources (z=3.320, p<.001). However, on reflection though, lack of resources (e.g. time, funding and expertise) was often cited as a major barrier to sustainability reporting by both mail survey and interview respondents throughout this study. As a contrasting viewpoint, whilst it may be a contributing factor, perhaps the 'insufficient resources' defence is being used to camouflage a bigger issue, which has more to do with the lack of understanding of sustainable development, the importance of planning for the future and the role of sustainability reporting in communicating to stakeholders the local authorities contribution to sustainability.

It was again intended that this issue would be further investigated during the interview process. However, the lack of knowledge on the GRI/PASS guidelines by interviewees prevented further investigation of this issue (with only two authorities having heard of the guidelines with not one authority utilizing it). Thus, without further research being conducted on this issue, it appears through preliminary results, that there is a lack of support for Hypothesis 10.

9.6.4 Hypothesis 11 (H11): There is no consistent definition of sustainable development being used in local government in Australia.

Prior research has indicated that the term, sustainable development, has multiple meanings. It was anticipated that no consistent definition of sustainable development is being utilized in sustainability reporting in local government. This would thus highlight the lack of guidance currently available for local authorities in the preparation of the reporting message. The mail survey findings indicated that an array of different definitions was being utilized with the most utilized definition being in-house developed definitions (31.51%).

The interview results highlighted authorities at different stages of development in identifying a formal definition on sustainable development. Eight authorities had

developed a definition with one further authority currently in the process of development. There was found to be a general lack of awareness and knowledge by interviewees as to how the chosen definition was developed. In investigating further, it was established that such definitions had an emphasis on integrated sustainable development. This was further highlighted with two authorities in the process or having future plans to develop further their organization's definition to encompass an integrated viewpoint of sustainable development (providing for a total of 69.23% of interviewee respondents that had either developed or were in the process of developing a definition for sustainable development).

As indicated by these results, it appears that consistency in definition is not being achieved through the use of one particular definition in local government authorities. However, as indicated by the interview results, perhaps, consistency is being achieved in a limited way through the development of definitions within local authorities that encompass integrated definitions of sustainable development. Authorities, in developing such definitions that meet the particular needs and requirements of the individual organization, could provide some consistency in focusing local authorities towards an integrated viewpoint of sustainability. Thus, it appears therefore that Hypothesis 11 is not conclusively supported. From a communication perspective, these results highlight however that whilst there may be some minor consistencies, overall there appears to be a lack of a leading definition guiding local authorities in the preparation of the communication reporting message.

9.6.5 Summary

The fifth research question focused on the guidance available to preparers in the preparation of the sustainability communication message. Whilst there was inconclusive results for Hypothesis 9 and 10, results indicate there is currently no dominant reporting framework being utilized by local authorities with a further lack of consistency existing over the definition being utilized for the term 'sustainable development'. This brings into question the communication message that is currently being produced by local authorities - with no dominant sustainability reporting framework or definition of sustainable development being utilized, local authorities have little available guidance to lead and direct them in regards to best practice. This can lead to an incomplete and unreliable sustainability reporting message being

produced and in the local authorities approach to engaging stakeholders through sustainability reporting.

9.7 The Need for a Reporting Framework

Sustainability reporting in the local government sector in Australia is an emerging activity with a number of communication gaps highlighted within this study. Examining various elements of the communication process has helped to highlight that, whilst reporting is taking place, there is currently a lack of clarity in the form and content of the reporting message being produced, who is preparing and reporting the message, the developmental processes surrounding the reporting message and the reporting medium being utilized to report the sustainability reporting message to stakeholders. In an effort to overcome the current communication issues and to advance the sustainability reporting agenda within the local government sector, it would seem timely to identify approaches that provide guidance to local authorities on how best to discharge their accountabilities in relation to sustainability activities. Such guidance can be provided through the development of a reporting framework, specifically tailored to local government. Doing so, as highlighted by Ball (2004a), would ensure that sustainability reporting gains visibility, best practice is encouraged and would provide valuable help and assistance for local authorities commencing the due process.

To provide for this, the framework would need to be specific enough to guide the local government sector but yet general enough to be adapted to individual local authority's needs. The desirability for a reporting framework tailored specifically to local government was commented on by interview respondents. Twelve of the thirteen interviewee organizations indicated that there was a need for a framework specific to local government in Australia. The major reason cited by respondents (33.30%) was the current need for individual authorities to 're-invent the wheel' every time as they develop sustainability reporting practices within their organizations. This highlighted the lack of a standard and consistent reporting framework/set of guidelines available for use by local authorities in their reporting endeavours. However, as three authorities pointed out, local governments are essentially in the same business of providing goods and services to their municipalities. Thus, a reporting framework tailored specifically to the sector would help to guide and direct

the practice of sustainability reporting in local government. In doing so, a framework would help to advance the communication process by overcoming some of the apparent current communication issues surrounding the type and quality of the reporting message communicated as local authorities report to their stakeholders.

9.8 A Reporting Framework for Local Government

In conducting this study, it became progressively apparent that sustainability reporting should be ultimately the end product of numerous sustainable development processes and activities surrounding and taking place within local government authorities. As such, sustainability reporting should not just be 'reporting for the sake of reporting'. As was highlighted by Local Authority K; '*I'm afraid local government falls into the trap of producing doorstops and it would be just a report for the sake of a report*'. This was further emphasized by the three authorities that currently have mandated environmental reporting requirements in NSW – all were of the opinion that producing the SoE report was no more than a compliance report or a 'tick the box' report. Sustainability reporting for local government should be more than that; it should contribute to achieving real, consistent and on-going benefits in the process of working towards and achieving sustainability for local authorities. This is achieved by incorporating sustainability issues into organizational planning and decision making (Adams and McNicholas 2007) with the sustainability report ultimately being utilized by local authorities as a communication tool to communicate with stakeholders on the authorities sustainability activities. As such, the sustainability reporting process becomes part of the organizational planning process for the local authority and is linked to practical action and everyday activities.

9.8.1 The Strategic Plan

To incorporate the sustainability reporting process into the planning and strategic focus of the local authority, the development of a reporting framework needs to commence from the strategic planning level of the organization. Local government authorities are governed by the various Local Government Acts and legislation in each respective State or Territory. Across each State/Territory, there are a range of legislative requirements relating to the need to prepare a strategic plan[9] and the length

[9] Individual state and territory legislation refers to strategic plans by different titles, including shire plans, strategic management

of time the plan should cover (ranging from four years to ten years). Generally, though, there is a broad requirement across the several Acts that local governments plan for the future.

In setting the sustainability reporting framework from this level, it ensures the process is seen as an extension of the local authorities goals and vision and will assist in driving change and in making sustainability a part of the organization's daily actions (Leuenberger 2006; Mazzara *et al.* 2010). It would also provide assistance in encouraging and supporting necessary cultural changes within the local authority, which as indicated from the findings in this study, is a factor in restricting the further development of sustainability reporting within the local government sector[10].

Further, as discussed by Bebbington (2007), it helps to invoke trust in the sustainable development commitment of the organization if there is evidence of sustainable development being incorporated into the strategic planning processes. The need to commence the process from the strategic plan was also highlighted by mail survey respondents in examining reasons as to what was restricting sustainability reporting in local government. In this context, a significant reason cited by respondents was that it was not addressed in the local authorities strategic/corporate plan ($t=3.482$, $p<.01$).

The following discussion sets out the development of an initial reporting framework process. In doing so, there are a number of guidelines (or components of guidelines) that were previously identified in this study[11] that may be suitable in contributing towards the establishment of such a framework. Where relevant, these contributions are noted in discussing the development of this reporting framework. The framework sets out a clear reporting structure for local authorities to follow in preparing their sustainability reporting message. Whilst providing for a common reporting framework, the framework should also be adaptable to ensure that it can be tailored to individual local authority's specific needs and requirements. Thus, whilst a broad structure is provided which allows for consistency, it also allows for individuality amongst local authorities.

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plans, corporate plans and community strategic plan.

[10] Refer Section 8.4.1.5 for details. This finding concurs with Ball (2007, 2005) who established, cultural change is a necessary element in enabling change towards a more sustainable society.

[11] Refer Table 3.3 for details.

9.8.2 Development of the Sustainability Reporting Framework

To commence the process of development of a sustainability reporting framework, an initial decision needs to be made by local authorities in how the framework will be managed and who will be responsible for it. With sustainability affecting all components of a local authority and to ensure that all issues surrounding sustainability are discussed, a sustainability reporting framework requires input from all departments within the local authority. To allow for this, a multi-disciplinary sustainability reporting team needs to be established which would be charged with the responsibility of the development, implementation, monitoring and review of the sustainability reporting framework.

Included within the reporting team should be key leadership who have the responsibility for the strategic planning process within the local authority, such as the mayor, the general manager and the chief financial officer. As highlighted in this study, the involvement and support by key leadership within the local authority is necessary[12] in order to drive the sustainability reporting within local authorities. By commencing the reporting process at the highest level in the local authority at which key leadership are actually involved, it helps to encourage and foster support from leadership. Further, by cultivating commitment amongst leadership for the development of a sustainability reporting framework, this would help to define a key position responsible within the organization to support and drive the development of sustainability reporting; an issue that was previously identified as currently contributing to the lack of a clearly defined process in the development of the communication message within local authorities[13].

The sustainability reporting team also requires involvement from key departments within the local authority who have responsibility for sustainability impacts on a day-to-day basis, such as community services, environmental management, asset management, engineering and financial services. This will ensure that the departmental representatives will carry the responsibility to ensure that tasks assigned to their individual departments are delegated to the appropriate staff members for action within their department, that processes are put in place to complete these tasks

[12] Refer Section 9.4.1 for details.
[13] Ibid.

and that regular updates are provided back to the sustainability reporting team on the progress of these assigned tasks.

The development of a sustainability reporting framework also requires input from stakeholders external to the local authority. Stakeholder engagement is critical to the successful establishment of sustainability reporting in local government. However, as highlighted from this study, there is current uncertainty in the stakeholder engagement process in local authorities which is contributing to the lack of a clearly defined sustainability communication message.

Consultation with stakeholders is required throughout the development of the sustainability reporting framework and can be cultivated through such avenues as conducting workshops with the community, undertaking customer satisfaction surveys, focus groups or contributions through a council web-site. An initial decision needs to be made by the local authority in commencing the sustainability reporting process as to what methods of engagement will be utilized in engaging their stakeholders with some methods of engagement more suited to particular types of local authorities in comparison to others[14]. The sustainability reporting team would then be charged with the responsibility of ensuring that the appropriate processes are put in place to engage and consult with stakeholders. By doing so, this would provide an avenue for the local authority to gain a clearer understanding of who their audience is and the stakeholders needs in communicating the reporting message. It will also help to clarify and refine the stakeholder engagement process in the communication process.

The initial steps towards the development of a sustainability reporting framework for local government authorities are now outlined.

1. Define what 'Sustainable Development' means to the individual local authority

The term 'sustainable development' means different things to different people and local authorities. To determine a point of reference for the local authority commencing the sustainability reporting process, the term must be defined. By defining a clear, useable and grounded definition, it will provide the basis for a

[14] Refer Section 9.4.2 which discussed rural authorities favouring less formalized and indirect methods of engagement with their stakeholders.

decision-making framework to be embedded across the authority (Birney *et al.* 2010).

Results from this study indicate that there is currently a lack of a leading definition being utilized by local authorities which is contributing to the lack of guidance available in the preparation of the sustainability communication message in the local government sector. To provide for consistency and comparability in the sustainability reporting message, the following definition of sustainable development is adopted[15] for the purposes of this reporting framework.

> '*Development undertaken at the local community level which seeks to maintain, integrate and, where possible, improve environmental protection, social equity and economic/financial growth within the community'*.

By the adoption of this definition, it provides the local government sector with a clear focus of sustainable development in focusing local authorities on an integrated viewpoint of sustainability. This will help to clarify current reporting issues surrounding the lack of available guidance to lead and direct local authorities in the preparation of the sustainability reporting message.

2. The vision statement

Having defined sustainable development, the term needs to be linked to practical and everyday activities of the local authority in an effort to lead the local authority towards sustainability. In doing so, such an approach would help and assist to progress sustainable development throughout the culture of the organization.

To do this, the vision statement contained within the local authority's strategic plan needs to be examined by the sustainability reporting team. The vision statement sets the long-term direction and values of the organization and helps to answer the question 'where do we want to go?'. The definition of sustainable development needs to be examined with the vision statement of the local authority to ensure that they are compatible and they complement one another. In essence, the sustainable development definition extends the vision statement and becomes the sustainable development statement of the local authority. Where a re-examination highlights incompatibilities, these incompatibilities need to be amended to ensure that the two

[15] As previously developed in Section 2.3.3.

statements complement one another.

3. Identify specific sustainable development strategies

The strategic objectives of the local authority that form part of the strategic plan and that describe the vision of the local authority then need to be analyzed by the sustainability reporting team in terms of their sustainability impacts. From this analysis, specific sustainable development strategies need to be established. Undertaking this approach may well highlight that some of the current strategic objectives of the local authority are not sustainable when examined from a sustainability perspective. If this is concluded, then the objectives would need to be re-aligned to ensure that they promote and lead towards sustainability.

Table 9.1 provides an example of this approach for Local Authority X where the strategic objective is 'building strong, healthy, prosperous and vibrant communities'. The example provides four sustainable development strategies in achieving this objective.

Table 9.1
Example of Identification of Sustainable Development Strategies

Local Authority X **Strategic Objective 1: Building strong, healthy, prosperous and vibrant communities**	
Strategy	**Description**
1	Review the long-term approach to waste management
2	Facilitate effective regional and economic development
3	Provide and promote safe community environments
4	Provide for enhanced health and community services

4. Develop individual short-term and long-term action plans

For each specific sustainability strategy developed in Step 3, individual short-term and long-term action plans (for example, one, two and five year action plans) would then be required to be developed by the sustainability reporting team. These action plans set out how the local authority will achieve each strategy. Alongside each action, the department/s responsible for the completion of the action would need to be

provided. The departmental representatives on the sustainability reporting team will then have the responsibility to ensure that the tasks assigned to their departments are delegated to the appropriate staff members for action. This, then, helps to transfer the sustainability goals and strategy of the organization into the day-to-day operational activities of the local authority by ensuring responsibility is given for each individual action.

Whilst the action plan sets out what needs to be completed, without appropriate resources, these plans may not actually be achieved. Thus, the action plan needs to detail, where applicable, resources that are required to complete individual actions. With respondents from this study indicating that lack of resources (e.g. time, funding and expertise) are seen as the major barrier to sustainability reporting, the inclusion of this step would emphasize the need for local authorities to carefully consider the need to ensure appropriate resources are available for the completion of the these actions. To ensure adequate resourcing is provided and the successful completion of these plans, this may require the local authority, for example, to partner with other organizations such as State, non-governmental agencies or even other local authorities.

Table 9.2 provides an example of this step for Local Authority X (utilizing the objective from Table 9.1 and Strategy Number 1 being 'Review the long-term approach to waste management').

Table 9.2
Example of Identification of Action Plans
For Objective 'Review the Long-term Approach to Waste Management'

Action Plans	Resources Required	Anticipated Completion Date	Department Responsibility
Undertake a review of current waste management practices.	-	Feb 2011	Environment
Form project reference group with key stakeholders.	$120 per meeting	July 2011	Environment/ Community Relations/Finance
Review successful waste management models from other councils.	$4,500	Dec 2011	Environment
Prepare waste management costing options.	Waste management consultant @ $200 per day	Mar 2012	Finance
Consult with community on available options.	$300	July 2012	Community Relations
Report to council on preferred options.	-	Dec 2012	Environment/ Finance
Implementation of options	Depends on option taken	Dec 2014	Environment
Education program to be conducted with key stakeholders	$1,200	July 2014-June 2015	Community Relations

5. Review policies and procedures for sustainable development impacts

To guide the implementation of the action plans, a review of the local authority's established policies and procedures would then need to be conducted to take into account their sustainable development impacts. Responsibility for this task would be assigned to each departmental representative on the sustainability reporting team to

ensure a process of review is established for each department's relevant policies and procedures. Where required, current policies and procedures may need to be amended or new additional policies and procedures developed.

In following these initial steps in the development of a sustainability reporting framework, the subsequent reporting on sustainability actions taken by the local authority would become a logical continuation of this process in that it will communicate to stakeholders how the local authority is achieving sustainability in meeting its specific strategic objectives leading from the authority's strategic plan[16]. Thus, the reporting approach is built around the strategic plan of the local authority and provides an effective avenue to communicate and engage with stakeholders. In doing so, a story is developed to explain the progress towards sustainability for the local authority as a whole. To communicate this story to stakeholders, the reporting approach should be clearly defined providing for consistency and comparability across the local government sector. As such, a common reporting structure for local authorities is now discussed.

9.8.3 Sustainability Reporting Structure

By providing local authorities with a common sustainability reporting structure, this will help to provide clarity in the production and transmission of the sustainability communication message within the local government sector. In commencing this process, an initial decision needs to be made by the sustainability reporting team as to who should be involved in the preparation of this report. Results from this study have indicated that there is current uncertainty in local authorities as to who should be involved in the preparation of the sustainability communication message. To provide clarity, there needs to be one key person within the sustainability reporting team designated responsibility for the preparation of the sustainability communication message. Whilst reporting data will be required from numerous departments across the local authority, this person will be responsible for the coordination of this reporting data and the preparation and development of the sustainability report. Accountants have key skills and abilities based on long established traditions and standards for reporting that could be well utilized in this role of sustainability report

[16] This approach is consistent with Contribution Number 1 Towards a Local Government Reporting Framework – Incorporation of Sustainable Strategies into Strategic Planning and Reporting (Previously identified in Table 3.3).

preparer.

However, results from this study have indicated that accountants are not yet as utilized as they could be in the sustainability reporting process in local government. With results highlighting the perceived lack of appropriate skills accountants bring to this area of reporting, there is a current need for both the accounting profession and the accounting education system to re-examine current education and training requirements of accountants. Further, local authorities needs to take a broader view of the accountant's role. By doing so, this will help to support and encourage the further development of the accountants role in the sustainability reporting process in local authorities.

To provide for clarity and consistency in the type of communication channel being utilized to transmit the communication message, the sustainability report needs to be a separate stand-alone report. Whilst results from this study have highlighted an array of reporting media being utilized with the annual report the most utilized reporting medium; to allow local authorities to focus long-term, there needs to be a move away from the reporting approach of combining both financial and sustainability reporting together in the annual report.

Following this approach has led to sustainability reporting often being viewed as simply an extension of financial reporting with some additional social and environmental performance measures added in (Luckman 2006). Rather than attempting to tie the report into the financial reporting cycle and guidelines, the sustainability report needs to be a stand-alone report focused on a long-term set of guidelines appropriate to sustainable development. By doing this, the sustainability report will be seen as a discrete but separate report thereby providing clarity in the communication message being produced by local authorities.

The following sets out a reporting structure that can be utilized and refined by local authorities in communicating their sustainability reporting message to stakeholders. The reporting structure, as detailed in Table 9.3, is driven from the strategic plan and provides a reporting structure to monitor the development, implementation and achievement of the sustainable development strategic objectives and action plans of the local authority. Where applicable, summarized examples are provided to clearly

indicate how the reporting framework process links to this reporting structure.

Table 9.3
Sustainability Reporting Structure[17]

Section	Section Title	Section Description	
1	Mission Statement and Strategic Objectives	This section incorporates the mission statement and strategic objectives for the local authority.	Summarized Example: **Mission Statement:** To be a safe, vibrant sustainable community in which to live, work and play. **Strategic Objectives:** • Building strong, healthy, prosperous and vibrant communities • Is recognized for its beauty and quality of environment • Achieves good quality development and urban management
2	Sustainable Development	This section will include an introductory statement from the local authority about the importance of sustainability and its relevance to the local authority. The term 'sustainable development' will be clearly defined and explained along with detail provided on the key impacts, risks and opportunities in relation to sustainable development.	

[17] This reporting structure incorporates Contribution Number 2, 3 and 6 Towards a Local Government Reporting Framework – PASS Reporting Disclosure Elements, GRI Strategy and Profile Disclosures and CIPFA Structure of Sustainability Reports (Previously identified in Table 3.3).

Section	Section Title	Section Description	
3	Organizational & Community Profile	This section will include what the local authority does, for whom and why, highlighting the importance of stakeholder engagement. Detail will also be provided on the profile of the community that the authority serves.	
4	Sustainable Development Strategies of the Local Authority	This section will include identification of the specific sustainable development strategies of the local authority for each of the strategic objectives.	*Summarized Example for Strategic Objective 1:* **Building strong, healthy, prosperous and vibrant communities** Strategies: • Review the long-term approach to waste management • Facilitate effective regional and economic development • Provide and promote safe community environments • Provide for enhanced health and community services
5	Action Plans	This section will include the identification of individual action plans in relation to each of the specific sustainable development strategies. Progress, results, and actions will be reported against each action plan that has been implemented or yet to be implemented.	*Summarized Example for Strategic Objective 1, Strategy 1:* **Review the long-term approach to Waste Management** Action Plan for 2010/2011- Undertake a review of current waste management practices. Progress of Action Plan- A review of current waste management practices was completed in January 2011. The full report is available for viewing at www.localauthorityx.gov.au. The review focused on what waste management services and practices are currently being utilized by Local Authority X, the costs involved, the cost effectiveness and efficiency of these services.

Section	Section Title	Section Description	
	Action Plans (continued)	To ensure results are reported in a manner that is clear and understandable, they are to be reported through the use of descriptive assessments as the primary reporting approach with sustainability indicators being utilized to complement and provide evidence towards sustainability[18].	*Summarized Example for Strategic Objective 1, Strategy 1 (continued)* Key Issues from the Review: - A range of waste management practices are being undertaken by council to promote and provide prudent sustainable development practices. - The council recycling program could be better utilized by the community. - An effective community education program is required to increase recycling. - Community input is required to ensure all viewpoints are taken into consideration in the further development of a long-term approach to waste management. Key Performance Indicators utilized: • Total weight of waste by type and disposal method; • Average charge for domestic waste management services per residential property; • Costs per service for domestic waste collection; • Recyclables - kilograms per resident per annum • Domestic waste - kilograms per resident per annum Planned actions for 2011/2012: A project reference group to be formed with key stakeholders. Review waste management models from other councils.
6	Policies and Procedures	This section will highlight and describe the policies and procedures followed in relation to sustainable development.	

[18] This approach is consistent with Contribution Number 7 Towards a Local Government Reporting Framework – Descriptive Assessments (primary) with indicators (secondary) reporting approach (Previously identified in Table 3.3). It further concurs with mail survey results (Section 7.3.1) in that written explanations were being most utilized by local authorities in reporting on sustainability, followed by financial measures and collections of indicators.

Section	Section Title	Section Description	
7	Report Assurance	This section will describe assurance (internal or external) processes performed on the report prior to publication.	
8	Stakeholder Engagement	This section will describe the process of engagement that the local authority has undergone in the development of the report with a request to stakeholders to provide feedback on the report.	

This framework provides a model for local government authorities to assist them in the development, implementation, monitoring and review of a sustainability reporting framework. It provides assistance in the development of a clear communication message for local authorities to follow and report against and in doing so, helps to provide a certain level of consistency in the reporting process.

Whilst providing for a common framework, to allow for individuality amongst local authorities, this framework can be adapted and changed to ensure it meets individual local authority's specific needs and requirements. In doing so, this concurs with a recent study by Dumay *et al.* (2010) who, in conducting a critique of the GRI Guidelines concluded that organizations need to 'tell their story' through developing their own sustainability narratives rather than try to develop a set of measures, numbers or indicators based on generic guidelines that may be difficult to understand or have little relevance.

The framework also requires testing in 'real life situations' and needs to be applied to individual cases and, in doing so, it will allow for the further development of the framework in moving it to the next level, in providing more detailed and specific guidelines appropriate to sustainability reporting in local authorities. It also must be acknowledged, that whilst being developed for the local government sector in Australia, the framework may also have wider applicability to the international local authority audience.

In the next section, the limitations of this study are discussed.

9.10 Limitations of the Study

As with any study, there was a number of limitations that need to be discussed. With the use of mail surveys in this research, a limitation of their usage is that the answers to questions are conditional on the type of questions being asked. The questions asked may only elicit part of the users' views (Alreck & Settle 1985). In an attempt to avoid bias within the structuring of questions, an open-ended question was included at the completion of the survey asking respondents to provide any comments that they wished to make in relation to the general subject matter.

In relation to the interviews that were conducted, a limitation over-riding the

interviews was the risk of bias, both through the interviewer's and the interviewees' own attitudes and perceptions (Kidder *et. al* 1986). To minimize this bias, semi-structured interview techniques and questions were utilized.

It also must be acknowledged that a restriction of the study was the concentration of interview subjects to three States of Australia, being Victoria, NSW and Queensland. As each State has its own issues in relation to local government, it may be difficult to extrapolate the interview results from this study across all states within Australia. However, as was highlighted in the most recent Local Government National Report (Department of Infrastructure, Transport, Regional Development and Local Government 2010), whilst there may be some variation in functions and responsibilities from State to State, broadly speaking local government authorities roles and responsibilities across Australia are similar in type and approach. Therefore, the results from the interview phase of this study could be applicable Australia-wide.

The following section discusses the directions and opportunities for future research.

9.11 Future Research and Opportunities

As this study was an exploratory study in an emerging field of accounting, there is much opportunity for future research. In doing so, such research can assist in the further development of a more coherent body of knowledge and understanding (Broadbent and Guthrie 2008) of sustainability reporting in the local government sector**.**

There is a number of directions future research could take. A number of these have already been noted throughout the study and include more detailed research studies examining the effects of mandatory reporting requirements on local government sustainability reporting practices, research that further explores the high occurrence of social reporting in local authorities and research that examines issues that have been highlighted by this study as restrictions to sustainability reporting including the role of culture and the levels of influence from key leaders within the organization.

Further research is also required in an effort to advance the sustainability reporting framework, developed in this study to the next level in providing more detailed guidelines appropriate to the local government sector. Additional research is also

required to provide further evidence either to support or to reject a number of hypotheses in this study. They include research focusing on the choice of reporting media and focus of reporting (H2 and H3), research focusing on the role of stakeholder engagement in the establishment of sustainability reporting (H6), research focusing on the reporting guidelines and reporting elements that are being used in local authorities (H9 and H10) and, finally, the sustainable development definition being used by local authorities (H11).

At a more general level, support by further interview work across other States of Australia or across specific classifications of local government could be utilized to strengthen and complement these results and make them more conclusive. Initial developmental work could also be initiated with individual local authorities to develop and refine the proposed reporting framework developed from this study. Further, research that examines applicability of the framework to the local authority community from a wider international perspective could also be undertaken.

Appendix I: Mail Survey - Document

QUESTIONNAIRE

Definition of Terms

Sustainable Development	Development undertaken at the local community level which seek to maintain, integrate and improve environmental protection, social equity and economic/financial growth within the community.
Sustainability Reporting	An integrated approach to reporting to stakeholders that focus on the environmental, social and economic/financial activities undertaken that seek to achieve specific objectives identified in the pursuit of sustainable development by the local government agency.

1 What is your job title?

2 What state or territory of Australia is your organisation situated in? (*Please tick*)

- ❑ New South Wales
- ❑ Northern Territory
- ❑ Queensland
- ❑ South Australia
- ❑ Tasmania
- ❑ Victoria
- ❑ Western Australia

3

- ❑ Less then $5 M
- ❑ $5,000,000 - $10,000,000
- ❑ $10,000,001 - $20,000,000
- ❑ $20,000,001 to $50,000,000
- ❑ $50,000,001 - $100,000,000
- ❑ Greater than $100 M

4 According to the Australian Classification of Local Government (ACLG):

a. What classification is your organisation? (*Please tick*)

	URBAN		**RURAL**
❑	Capital City	❑	Significant Growth
❑	Metropolitan Developed	❑	Agricultural
❑	Regional Town/City	❑	Remote
❑	Fringe		

b. What is the residential population of your local government area? *(Please tick)*

	URBAN		**RURAL**
❑	< 30 000	❑	< 2000
❑	30 000 - 70 000	❑	2 000 - 5 000
❑	70 001 -120 000	❑	5 001 - 10 000
❑	> 120 000	❑	10 001 - 20 000

Reporting on Sustainability

5 Do you report any VOLUNTARY sustainability information to your external stakeholders in the following areas? ***(Please tick)***

Type of Information	Examples of Voluntary Reporting Information
Environmental	Voluntary reporting on energy consumption, greenhouse emissions, water usage/water recycled, biodiversity, waste levels, initiatives to mitigate environmental impacts.
Social	Voluntary reporting on occupational health and safety programs, employee data, employee training programs, equal-opportunity data, community well-being programs.
Economic	Voluntary reporting on geographic breakdown of markets, percentage of contracts that were paid in accordance with agreed terms, total payroll expenditure broken down by region, donations provided to community groups broken down in terms of cash and in-kind.

Environmental	**Social**	**Economic**	**All Three**
❑ YES	❑ YES	❑ YES	❑ YES
❑ NO	❑ NO	❑ NO	❑ NO

If you answered NO to all of the above areas, why do you NOT report any sustainability information?

_____

_____

If you answered NO to all of the above areas, please go to Question 36. Otherwise continue to Question 6.

6 In what year did you commence reporting this voluntary information? ***(Please tick applicable boxes)***

	Environmental	Social	Economic	All Three Areas
2008	❑	❑	❑	❑
2007	❑	❑	❑	❑
2006	❑	❑	❑	❑
2005	❑	❑	❑	❑
Other _____	❑	❑	❑	❑

7 How important are each of the following factors in explaining why you report this information ***(Please tick applicable boxes)***

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Improved engagement with key stakeholders	❑	❑	❑	❑	❑
Improved public image	❑	❑	❑	❑	❑
Response to pressure from senior level management	❑	❑	❑	❑	❑
Response to pressure from councillors	❑	❑	❑	❑	❑
Response to pressure from stakeholder groups	❑	❑	❑	❑	❑
Response to pressure from State and Federal Government	❑	❑	❑	❑	❑
Show alignment to national and world concerns	❑	❑	❑	❑	❑
Raise public awareness of sustainability issues	❑	❑	❑	❑	❑
Educate the community	❑	❑	❑	❑	❑
Change community attitudes (recycling, waste, energy)	❑	❑	❑	❑	❑
Streamline reporting processes	❑	❑	❑	❑	❑
Demonstrate progress towards organisational commitments	❑	❑	❑	❑	❑
Other _____	❑	❑	❑	❑	❑

8 How important is the following reporting medium to your organisation in reporting information to your stakeholders? ***(Please tick applicable boxes)***

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Stand-alone sustainability report	❑	❑	❑	❑	❑
Annual report	❑	❑	❑	❑	❑
Corporate/strategic report	❑	❑	❑	❑	❑
Operational plans	❑	❑	❑	❑	❑
State of environment report	❑	❑	❑	❑	❑
Community report	❑	❑	❑	❑	❑
Budget statements	❑	❑	❑	❑	❑
Key performance indicator reports	❑	❑	❑	❑	❑
Council minutes	❑	❑	❑	❑	❑
Web-site	❑	❑	❑	❑	❑
Staff training manuals	❑	❑	❑	❑	❑
Policy documents	❑	❑	❑	❑	❑
Management reports	❑	❑	❑	❑	❑
Other _____	❑	❑	❑	❑	❑

9 In what reporting medium(s) is your organisation's voluntary sustainability information being reported? (*Please tick as many as applicable*)

	Environmental	Social	Economic	All Three Areas
Stand-alone sustainability report	❑	❑	❑	❑
Annual report	❑	❑	❑	❑
Corporate/strategic report	❑	❑	❑	❑
Operational plans	❑	❑	❑	❑
State of environment report	❑	❑	❑	❑
Community report	❑	❑	❑	❑
Budget statements	❑	❑	❑	❑
Key performance indicator reports	❑	❑	❑	❑
Council minutes	❑	❑	❑	❑
Web-site	❑	❑	❑	❑
Staff training manuals	❑	❑	❑	❑
Policy documents	❑	❑	❑	❑
Management reports	❑	❑	❑	❑
Other _____	❑	❑	❑	❑

10 How important is each of these voluntary sustainability reporting approaches to your organisation? ***(Please tick)***

	Very Unimportant	Unimportant	Neutral	Important	Very Important
A focus on environmental reporting	❑	❑	❑	❑	❑
A focus on social reporting	❑	❑	❑	❑	❑
A focus on economic reporting	❑	❑	❑	❑	❑
An integrated reporting approach focusing on environmental, social and economic factors	❑	❑	❑	❑	❑

11 For the most important approach you indicated in Question 10, please explain why you consider it is more important for your organisation in comparison to the other approaches.

_____
_____
_____

12 In view of your organisations priorities and commitments, how important is reporting on sustainability to your organisation? ***(Please tick applicable box)***

Very Unimportant	Unimportant	Neutral	Important	Very Important
❑	❑	❑	❑	❑

13 How significant is each of the following factors in restricting or preventing sustainability reporting in your organisation? ***(Please tick applicable boxes)***

	Very Insignificant	Insignificant	Neutral	Significant	Very Significant
A lack of:					
- Inter-departmental cooperation	❑	❑	❑	❑	❑
- Expertise and knowledge	❑	❑	❑	❑	❑
- Funding	❑	❑	❑	❑	❑
- Data inadequacy	❑	❑	❑	❑	❑
- Infrastructure	❑	❑	❑	❑	❑
- Community interest	❑	❑	❑	❑	❑
- Support from senior management	❑	❑	❑	❑	❑
- Support from councillors	❑	❑	❑	❑	❑
Not addressed in the strategic/corporate plan	❑	❑	❑	❑	❑
More important financial allocations	❑	❑	❑	❑	❑
More important day-to-day issues to deal with	❑	❑	❑	❑	❑
Other _____	❑	❑	❑	❑	❑

Key Factors in Establishment of Sustainability Reporting

14 How important is key leadership support and commitment in the establishment of voluntary sustainability reporting practices? ***(Please tick applicable box)***

Very Unimportant	Unimportant	Neutral	Important	Very Important
❑	❑	❑	❑	❑

15 At what level does key leadership support and commitment need to originate? ***(Please tick applicable box)***

❑	Mayor	❑	Chief Financial Officer
❑	Councillors	❑	State Government
❑	General Manager/CEO	❑	Federal Government
❑	Departmental Heads	❑	Other _____

16 How important is stakeholder engagement in the establishment of voluntary sustainability reporting? ***(Please tick applicable box)***

Very Unimportant	Unimportant	Neutral	Important	Very Important
❑	❑	❑	❑	❑

17 Which stakeholders are important to engage with in the establishment of voluntary sustainability reporting practices? ***(Please tick applicable boxes)***

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Residents	❑	❑	❑	❑	❑
Taxpayers	❑	❑	❑	❑	❑
Employers	❑	❑	❑	❑	❑
Businesses	❑	❑	❑	❑	❑
Community Interest Groups	❑	❑	❑	❑	❑
Suppliers	❑	❑	❑	❑	❑
Other _____	❑	❑	❑	❑	❑

18 Please identify any other factors that you consider important in the establishment of voluntary sustainability reporting.

_____
_____
_____

Sustainability Report/Information Preparation

19 Which department prepares your organisations external voluntary sustainability report/information? ***(Please tick applicable box)***

❑	Environmental department	❑	Strategic planning department
❑	Finance department	❑	Corporate planning department
❑	A sustainability reporting team consisting of the following departments: _____	❑	Outsourced
		❑	Other _____

_____

20 Were accountants utilised in preparing the external sustainability report/information? ***(Please tick applicable box)***

❑ YES ❑ NO

If you answered NO to this question, please go to Question 23

21 How important is each of the following factors in explaining why accountants are used in the sustainability reporting process? ***(Please tick applicable boxes)***

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Have the necessary analytical skills	❑	❑	❑	❑	❑
Have the necessary reporting expertise	❑	❑	❑	❑	❑
Have the necessary planning and development skills	❑	❑	❑	❑	❑
Best placed to assess financial viability	❑	❑	❑	❑	❑
Best placed to manage the budgetary process	❑	❑	❑	❑	❑
Seen as an extension of financial reporting	❑	❑	❑	❑	❑
No-one else available at the time	❑	❑	❑	❑	❑
Other _____	❑	❑	❑	❑	❑

22 What level of involvement has the accountant in the sustainability reporting process in relation to each of the following roles? ***(Please tick applicable boxes)***

	Not Involved	Uninvolved	Neutral	Involved	Very Involved
Preparer of sustainability report	❑	❑	❑	❑	❑
Key decision-maker	❑	❑	❑	❑	❑
Advisory role	❑	❑	❑	❑	❑
Bookkeeping role	❑	❑	❑	❑	❑
Monitoring role	❑	❑	❑	❑	❑
Assists in financial costings	❑	❑	❑	❑	❑
Part of sustainability reporting team	❑	❑	❑	❑	❑
Provider of financial information	❑	❑	❑	❑	❑
Other _____	❑	❑	❑	❑	❑

Please go to Question 24

23 Why do you NOT use accountants in the external sustainability reporting process? ***(Please tick)***

❑	Have never considered using accountants	❑	They are too costly to utilise
❑	They are too busy with other reporting requirements	❑	Their skills thought to be irrelevant
❑	They do not have expertise in sustainability reporting	❑	Other _____

Guidelines Utilised in the Preparation of the Sustainability Report/Information

24 What type of reporting method(s) do you predominantly use in reporting voluntary sustainability information? ***(Please tick applicable boxes)***

	Never use	Rarely use	Neutral	Often use	Always use
Single index	❑	❑	❑	❑	❑
Collections of indicators	❑	❑	❑	❑	❑
Financial measures	❑	❑	❑	❑	❑
Written explanations	❑	❑	❑	❑	❑
Other non-financial measures (e.g. energy usage)	❑	❑	❑	❑	❑
Other _____	❑	❑	❑	❑	❑

25 Have you heard of the Global Reporting Initiative (GRI) or the GRI Sector Supplement for Public Agencies (SSPA)? ***(Please tick)***

	YES	NO
GRI	❑	❑
SSPA	❑	❑

If you answered NO to BOTH the GRI and SSPA, please go to Question 31 otherwise continue to Question 26.

26 Do you use the GRI or SSPA recommended guidelines in preparing the external voluntary sustainability reports? ***(Please tick)***

	YES	NO
GRI guidelines	❑	❑
SSPA guidelines	❑	❑

If you answered NO to Both the GRI and SSPA Guidelines, please go to Question 30. Otherwise continue to Question 27.

27 How important are the GRI and SSPA guidelines in the preparation of your voluntary sustainability report/information? ***(Please tick applicable boxes)***

	Very Unimportant	Unimportant	Neutral	Important	Very Important
GRI Guidelines	❑	❑	❑	❑	❑
SSPA Guidelines	❑	❑	❑	❑	❑

28 How significant is each of the following factors in explaining why you use the GRI/SSPA guidelines? ***(Please tick applicable boxes)***

	Very Insignificant	Insignificant	Neutral	Significant	Very Significant
Perceived as being international best practice	❑	❑	❑	❑	❑
Provide high levels of consistency and comparability	❑	❑	❑	❑	❑
Reports are well regarded	❑	❑	❑	❑	❑
Are seen to provide good information	❑	❑	❑	❑	❑
Provide common-sense indicators we can work with	❑	❑	❑	❑	❑
Provide a basis from which to develop our own practices	❑	❑	❑	❑	❑
Not aware of any other reporting guidelines	❑	❑	❑	❑	❑
Provide opportunities to access additional funding	❑	❑	❑	❑	❑
Other organisations are utilizing them	❑	❑	❑	❑	❑
Other	❑	❑	❑	❑	❑

_____

29 How important is each of the following factors in restricting the use of either or both of these guidelines? ***(Please tick applicable boxes)***

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Are not specific enough	❑	❑	❑	❑	❑
Are difficult to apply to local government	❑	❑	❑	❑	❑
Are not very useful	❑	❑	❑	❑	❑
Too general in information required	❑	❑	❑	❑	❑
Are too prescriptive	❑	❑	❑	❑	❑
Unable to meet the diversity in the public sector	❑	❑	❑	❑	❑
Lack of support from senior management	❑	❑	❑	❑	❑
Other	❑	❑	❑	❑	❑

_____

Please go to Question 31.

30 How important are each of the following factors in explaining why you do NOT utilise the GRI or SSPA recommended guidelines ***(Please tick applicable boxes)***

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Not relevant to our organisation	❑	❑	❑	❑	❑
Lack of resources	❑	❑	❑	❑	❑
Lack of expertise	❑	❑	❑	❑	❑
Culture does not support sustainability reporting	❑	❑	❑	❑	❑
Guidelines are not specific enough	❑	❑	❑	❑	❑
Cost of preparation outweighs any benefits	❑	❑	❑	❑	❑
The data is not available	❑	❑	❑	❑	❑
Other	❑	❑	❑	❑	❑

_____

31 How important do you consider the reporting of each of the following elements in regards to voluntary sustainability reporting to your external stakeholders? ***(Please tick applicable boxes)***

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Environmental Reporting Elements					
Materials	❑	❑	❑	❑	❑
Energy	❑	❑	❑	❑	❑
Water	❑	❑	❑	❑	❑
Biodiversity	❑	❑	❑	❑	❑
Emissions, effluents and waste	❑	❑	❑	❑	❑
Products and services	❑	❑	❑	❑	❑
Compliance with environmental laws and regulations	❑	❑	❑	❑	❑
Environmental impacts of transporting products	❑	❑	❑	❑	❑
Total environmental protection expenditures	❑	❑	❑	❑	❑
Social Reporting Elements					
Labor Practices and Decent Work Elements					
Employment	❑	❑	❑	❑	❑
Labor/management relations	❑	❑	❑	❑	❑

	Very Unimportant	Unimportant	Neutral	Important	Very Important
Occupational health and safety	❑	❑	❑	❑	❑
Training and education	❑	❑	❑	❑	❑
Diversity and equal opportunity	❑	❑	❑	❑	❑
Human Rights					
Investment and procurement services	❑	❑	❑	❑	❑
Non-discrimination	❑	❑	❑	❑	❑
Freedom of association and collective bargaining	❑	❑	❑	❑	❑
Forced and compulsory labor	❑	❑	❑	❑	❑
Child labor	❑	❑	❑	❑	❑
Security practices	❑	❑	❑	❑	❑
Indigenous rights	❑	❑	❑	❑	❑
Society					
Programs and practices that assess and manage the impacts of operations on communities	❑	❑	❑	❑	❑
Corruption	❑	❑	❑	❑	❑
Public policy	❑	❑	❑	❑	❑
Anti-competitive behaviour	❑	❑	❑	❑	❑
Compliance with laws and regulations	❑	❑	❑	❑	❑
Product Responsibility					
Customer health and safety	❑	❑	❑	❑	❑
Product and service labeling	❑	❑	❑	❑	❑
Marketing communications	❑	❑	❑	❑	❑
Customer privacy	❑	❑	❑	❑	❑
Compliance with laws and regulations concerning the use of products and services	❑	❑	❑	❑	❑
Administrative Efficiency					
Efficiency and Effectiveness of Services	❑	❑	❑	❑	❑
Economic Reporting Elements					
Economic performance	❑	❑	❑	❑	❑
Market presence	❑	❑	❑	❑	❑
Indirect economic impacts	❑	❑	❑	❑	❑
Expenditures	❑	❑	❑	❑	❑
Procurement	❑	❑	❑	❑	❑
Public Policy Reporting Elements					
Definition of sustainable development used	❑	❑	❑	❑	❑
Identification of the aspects that sustainable development policies have been developed for	❑	❑	❑	❑	❑
Identification of the specific sustainable development goals for your organisation	❑	❑	❑	❑	❑
Description of the process by which the aspects and goals were developed	❑	❑	❑	❑	❑
Identification of key indicators used to monitor progress, actions to ensure continuous improvement, any post-implementation assessments and targets	❑	❑	❑	❑	❑
Description of the role and engagement with stakeholders in relation to sustainability	❑	❑	❑	❑	❑

32 Of those reporting elements considered most important in Question 31, how significant is each of the following factors in explaining why they are important to your organisation ***(Please tick applicable boxes)***

	Very Insignificant	Insignificant	Neutral	Significant	Very Significant
Data is readily available	❑	❑	❑	❑	❑
Factors are of high importance to our organisation	❑	❑	❑	❑	❑
Our stakeholders have requested this information	❑	❑	❑	❑	❑
Other organisations are reporting on this information	❑	❑	❑	❑	❑
Relates to our organisations focus on sustainability reporting	❑	❑	❑	❑	❑
Other _____	❑	❑	❑	❑	❑

33 Do you refer to any other reporting guideline(s) in the preparation of your voluntary sustainability report/information? ***(Please tick as many as applicable)***

❑	OECD Guidelines	❑	Balanced Scorecard
❑	ISO 14000 Series	❑	Ecological Scorecard
❑	Accountability AA1000AS	❑	Melbourne Toolkit Model (ICLEI)
❑	UNEP/SustainAbility	❑	In-house Developed Guidelines
		❑	Other _____

34 What definition of sustainable development do you use to guide the preparation of your voluntary sustainability report/information? ***(Please tick applicable boxes)***

- ❑ Brundtland Report (WCED) Definition
- ❑ National Ecological Sustainable Development Definition
- ❑ LA21 Definition
- ❑ ISO 14000 Definition
- ❑ AA1000 Definition
- ❑ In-house Developed Definition. Please explain
- ❑ Other. Please explain.

_____
_____
_____

35 How important is each of the following factors in explaining why you have chosen this definition of sustainable development ***(Please tick applicable boxes)***

	Very Unimportant	Unimportant	Neutral	Important	Very Important
It is consistent with the framework we have chosen	❑	❑	❑	❑	❑
Matches our organisations values and goals	❑	❑	❑	❑	❑
Is the most common and well known definition	❑	❑	❑	❑	❑
Other organisations are utilizing this definition	❑	❑	❑	❑	❑
Was provided by higher level management with no explanation provided	❑	❑	❑	❑	❑
Other _____	❑	❑	❑	❑	❑

Future Sustainability Reporting Practices in your Organisation

36 What is the likelihood that in the future you will report voluntary sustainability information to your stakeholders? ***(Please tick applicable box)***

Not at all Likely	Unlikely	Undecided	Likely	Extremely Likely
❑	❑	❑	❑	❑

37 If you plan on reporting voluntary sustainability information in the future, compared to previous years, will the information be: ***(Please tick applicable boxes)***

	Constricted	Similar	Expanded
Environmental sustainability information	❑	❑	❑
Social sustainability information	❑	❑	❑
Economic/financial sustainability information	❑	❑	❑
All three areas	❑	❑	❑

38 Please add any other comments you wish to make in relation to sustainability reporting in local government.

(If further space is required for comments, please attach an additional page).

_____
_____
_____
_____
_____

Thank you for your participation in this questionnaire.
Please return the questionnaire in the reply paid envelope provided.

Attention: Belinda Williams
Lecturer
University of Tasmania
School of Accounting and Corporate Governance
Locked Bag 1314
Launceston
Tasmania 7250

To Whom It May Concern
On conclusion of this study, please provide the following organisation with a summary of the results:

Name of organisation _____

Address 1 _____

Address 2 _____

City _____

State and Postcode _____

Yours sincerely

Signed: _____

Position: _____

Please place this completed sheet into one of the prepaid envelopes provided.

Appendix II – Mail Survey Covering Letter

Name
Address 1
Address 2
Address 3

Date

Dear Sir/Madam

I am an Accounting PhD student at the University of Tasmania under the supervision of Associate Professor Trevor Wilmshurst and Professor Bob Clift. I am conducting research into local government organisations and sustainability reporting. Specifically, I am examining whether local government in Australia is reporting on sustainability, the role of accountants in the reporting process and what frameworks are being utilized to guide reporting.

To assess whether this has been achieved I am surveying all local government organisations in Australia and I would appreciate your assistance in completing the attached questionnaire. The results of this study will contribute to the ongoing debate surrounding sustainability reporting in the local government sector. The questionnaire will take approximately 60 minutes to complete. To assist you in responding to the questions, I have explained the meaning of a number of terms used throughout this study on the first page of the questionnaire.

As the questionnaire does not request your name (or that of your organisation), your response will be entirely anonymous. I will not be able (nor will attempt) to identify you or your organisation on receipt of the completed questionnaire. Although the results of the study may be published, it follows that they cannot be published in a way that potentially identifies you or your organisation.

I would be most pleased to provide you with a summary of the results when completed. If you would like a copy, please complete the enclosed form and return it in the smaller of the prepaid envelopes provided.

This study has been approved by the Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study you should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote ethics approval number H10438.

Please return the completed questionnaire in the prepaid envelope provided. Your completion and return of the survey will signify your consent to participate in this study. I can be contacted on 03 63243661 or Belinda.Williams@utas.edu.au if you have any further questions. Alternatively, my supervisor Associate Professor Trevor Wilmshurst can be contacted on 03 63243570 or Trevor.Wilmshurst@utas.edu.au. Thank you very much for your participation.

Yours sincerely

Belinda Williams
School of Accounting and Corporate Governance
University of Tasmania

Associate Professor Trevor Wilmshurst
School of Accounting and Corporate Governance
University of Tasmania

Appendix III: Interview Invitation Letter

Name
Address 1
Address 2
Address 3

Date

Dear Sir/Madam

My name is Belinda Williams and I am an accounting lecturer at the University of Tasmania and am currently completing my PhD studies under the supervision of Associate Professor Trevor Wilmshurst and Professor Bob Clift. I am conducting research into the local government organisations and sustainability reporting. Specifically, I am examining whether local government in Australia is reporting on sustainability, the role of accountants in the reporting process and what frameworks are being utilized to guide reporting.

Earlier this year, I commenced my study of this issue by conducting a survey questionnaire on all local government organisations in Australia. A response rate of 35.51% was achieved with very interesting results provided. I have enclosed a copy of a summary of the survey questionnaire results for your records. I am now at the second stage of my study which will involve conducting a small number of interviews with local government authorities.

The purpose of this letter is to enquire as to the possibility of your organisation being one of these organisations. The interviews will investigate why or why not local government report on sustainability and issues that were identified from the survey questionnaire.

Participation in this interview process is entirely voluntary. If you do participate in this study, you can decline to answer any question and can withdraw without effect or explanation. If you withdraw, you may also withdraw any interview data your organization has supplied to date. It is anticipated that the interview will be fully audio recorded and transcribed. You will be given the opportunity to review and amend any material including any transcripts from these recordings. The interview would be arranged at a time that would minimise any disruptions to your organisational operations. It is envisaged that the interview would be conducted on your organisations' premises and would take approximately 45 minutes.

Please note that I will ensure that you or your organisation are not identifiable in my thesis or other published material arising out of the study. Nor will I disclose you or your organizations identity as a participant to others except my supervisors. All raw data collected from this study will be stored at the School of Accounting and Corporate Governance, Launceston in a locked cabinet for a period of five years from publication. At the expiry of this five year period, the data will be destroyed in line with established University procedures.

This study has been approved by the Social Sciences Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study you should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote ethics approval number H10438.

If you are interested in participating in the interview process, please return the completed consent form in the prepaid envelope provided. I can be contacted on 03 63243661 or Belinda.Williams@utas.edu.au if you have any further questions. Alternatively, my supervisor

Associate Professor Trevor Wilmshurst can be contacted on 03 63243570 or Trevor.Wilmshurst@utas.edu.au. Thank you very much for your participation.

Yours sincerely

Belinda Williams
School of Accounting & Corporate Governance
University of Tasmania

Associate Professor Trevor Wilmshurst
School of Accounting & Corporate Governance
University of Tasmania

Appendix IV: Statement of Informed Consent

Title of Project:
Are Local Government Organisations in Australia Reporting on Sustainability?

1. I have read and understood the covering letter for this study.
2. The nature and possible effects of the study have been explained to me.
3. I understand that the study involves an audio-taped and transcribed interview of approximately 45 minutes in length that will investigate why or why not local government in Australia report on sustainability and issues that were identified from the survey questionnaire.
4. I understand that there are no risks anticipated in participating in this study.
5. I understand that all research data will be securely stored on the University of Tasmania premises for five years from publication, and then destroyed.
6. Any questions that I have asked have been answered to my satisfaction.
7. I agree that research data gathered from me for the study may be published provided that I or my organization cannot be identified as a participant.
8. I understand that my identity will be kept confidential and that any information I supply to the researcher(s) will be used only for the purposes of the research.
9. I agree to participate in this investigation and understand that I may withdraw at any time without any effect, and if I so wish, may request that any interview data I have supplied to date be withdrawn from the research.

Name of Participant:

Name of Organisation:

Address:

Preferred Method of contact about the interview:
(Please provide a phone number, or email address):

Signature: Date:

Appendix V: Listing of Interview Questions

Section 1:

1. Do you report sustainability information and what is the main focus of this reporting?
2. How long (in years) have you been reporting this information?
3. Why do you report on sustainability?
4. Do you think sustainability reporting has an important role in your organizations -
    i. current reporting processes?
    ii. future reporting processes?
5. What are the main obstacles obstructing/preventing sustainability reporting in your organization?
6. The mail survey results highlighted a large increase in the uptake of sustainability reporting in the 2005 year with smaller % increases in subsequent years. Why do you think this may be so?
7. How do you choose which reporting media you will use to report on sustainability?

Section 2:

8. In relation to the commencement of sustainability reporting in your organization, please describe –
    i. how it commenced
    ii. why it commenced including what were the main factors leading to the adoption of sustainability reporting e.g. pressure from the community, pressure from higher management, an individual within the organization.
9. Do you view internal stakeholders (e.g. employees) as important as external stakeholders in the establishment of sustainability reporting practices?

Section 3:

10. In which department does responsibility reside for sustainability reporting in your organization? Why? Do other areas contribute?
11. Do you believe accountants are important in the process of sustainability reporting? If not why not?
12. Do accountants need extra skills to become more involved in sustainability reporting? If so, which skills?

Section 4:

13. How do you determine as an organization what sustainability information to report on?
14. How important is it to your organization to have a definition of sustainable development that can be used to guide the preparation of your sustainability information?
15. The mail survey results indicated that the GRI/SSPA reporting framework is one of the least utilized reporting frameworks in local government. Why do you think this may be so?
16. Is the local government sector in need of a framework tailored to the particular sector? And if so, what do you envisage it will contain?

Appendix VI: Interview Schedule

Date of Interview	Authority	Type of Interview	Interviewee
17th November 2009	External Organization A	Face-to-face	Executive Officer
		Face-to-face	Environmental Coordinator
18th November 2009	Local Authority A	Face-to-face	Sustainability Manager
		Face-to-face	Financial Services Coordinator
19th November 2009	Local Authority B	Face-to-face	Manager Financial Services
20th November 2009	Local Authority C	Face-to-face	General Manager Corporate Services
21st November 2009	Local Authority D	Face-to-face	Manager Finance
23rd November 2009	Local Authority E	Face-to-face	General Manager
		Face-to-face	Manager Financial Services
		Face-to-face	Sustainability Manager
	External Organization B	Face-to-face	Executive Officer
26th November 2009	Local Authority F	Face-to-face	Director, Corporate and Community Services
	Local Authority G	Face-to-face	Director Sustainable Development
	Local Authority H	Face-to-face	Sustainability Programs Manager
27th November 2009	Local Authority I	Face-to-face	Manager Corporate Services
	Local Authority J	Face-to-face	Manager Financial Services
9th December 2009	External Organization C	Face-to-face	Manager
18th December 2009	Local Authority K	Face-to-face	General Manager
		Face-to-face	Environmental Coordinator
		Face-to-face	Environmental Officer
	Local Authority L	Face-to-face	Director Corporate Services
19th February 2010	Local Authority M	Telephone	Environmental Coordinator

Appendix VII: Type of Interview Respondent

Respondent	General Manager/ CEO	Financial Services Manager/CFO	Sustainability Manager/ Director	Environmental Manager/ Coordinator	Financial Services Coordinator[1]
Local Authority A			1		1
Local Authority B		1			
Local Authority C		1			
Local Authority D		1			
Local Authority E	1	1	1		
Local Authority F		1			
Local Authority G			1		
Local Authority H			1		
Local Authority I		1			
Local Authority J		1			
Local Authority K	1			2	
Local Authority L		1			
Local Authority M				1	
External Organization A	1			1	
External Organization B	1				
External Organization C			1		
Total	**4**	**8**	**5**	**4**	**1**

[1] The Financial Services Coordinator position was at the position below the Financial Services Manager/CEO; thus is separated out here for analytical purposes.

Appendix VIII: Mail Survey Responses

Year Commenced Sustainability Reporting

Year Commenced	Environmental	Social	Economic	Integrated
2008	9	5	4	4
2007	12	9	9	5
2006	8	9	8	4
2005	17	26	23	10
Prior to 2005	19	25	25	14
Unknown	13	12	11	7
Total	78	86	80	44[2]

Reasons in Explaining Why Organizations Report on Sustainability

Reasons	Did Not Respond	Very Unimportant	Unimportant	Neutral	Important	Very Important	Total
Key Stakeholders	3	1	3	5	51	32	95
Public Image	-	-	-	11	51	33	95
Pressure – Senior Management	5	2	5	38	36	9	95
Pressure - Councilors	6	3	3	34	40	9	95
Pressure – Stakeholder Groups	7	1	5	30	41	11	95
Pressure - Government	5	1	4	25	43	17	95
National/World concerns	6	4	4	28	43	10	95
Public Awareness	4	1	3	10	48	29	95
Education	6	-	1	10	49	29	95
Community Attitudes	6	-	1	10	46	32	95
Streamline Reporting	6	5	7	27	40	10	95
Organizational Commitments	2	-	1	16	52	24	95

[2] Whilst sixty-six respondents were engaging in an integrated viewpoint of sustainability (refer Chapter 6, Table 6.5), only forty-four responses are provided for year of commencement for this category. The difference being those respondents that commenced different sustainability reporting types in different years.

Importance of Different Reporting Media

Reporting Medium	Did Not Respond	Very Unimportant	Unimportant	Neutral	Important	Very Important	Total
Stand-alone Sustainability Report	10	3	10	33	25	14	95
Annual Report	1	1	-	5	45	43	95
Corporate/ Strategic Report	6	-	3	11	47	28	95
Operational Plans	5	-	4	12	50	24	95
State of Environment Reports	8	3	4	28	38	14	95
Community Reports	7	1	3	20	52	12	95
Budget Statements	3	-	2	12	46	32	95
KPI Reports	7	-	1	16	49	22	95
Council Minutes	5	-	1	23	40	26	95
Web-Site	3	-	1	11	47	33	95
Staff Training Manuals	7	2	5	34	35	12	95
Policy Documents	5	-	3	14	52	21	95
Management Reports	4	-	2	21	48	20	95

Sustainability Reporting in the Future

Sustainability Reporting	Did Not Respond	Not at all Likely	Unlikely	Neutral	Likely	Extremely Likely	Total
Yes	1	1	2	13	44	34	95
No	-	7	26	26	25	11	95
Total	1	8	28	39	69	45	190

Reporting Media Being Utilized

	Reporting on Sustainability				
Reporting Medium	**One Area**	**Two Areas**	**Three Areas**	**Total Reporting**	**Total Non-Reporting**
Stand-alone Sustainability Report	13	7	21	41	54
Annual Report	21	13	56	90	5
Corporate/ Strategic Report	14	9	45	68	27
Operational Plans	16	8	39	63	32
SoE Reports	17	4	17	38	57
Community Reports	16	7	27	50	45
Budget Statements	26	6	25	57	38
Key Performance Indicator Reports	-	-	36	36	59
Council Minutes	10	10	41	61	34
Web-Site	8	8	50	66	29
Staff Training Manuals	13	4	18	35	60
Policy Documents	13	4	36	53	42
Management Reports	9	6	40	55	40

Reporting Focus by Type of Reporting

Type of Sustainability Reporting	Reporting on Sustainability	No Response	Restricted	Similar	Expanded	Total
Environmental	Yes	1	2	29	46	78
	No	5	-	-	31	36
Social	Yes	4	2	33	39	78
	No	5	-	-	31	36
Economic	Yes	3	2	34	39	78
	No	8	-	-	28	36
Integrated	Yes	19	2	24	33	78
	No	9	-	-	27	36

Reporting on Sustainability by Total Revenue

Total Revenue	Yes	No	Total
Greater than $100M	23	3	26
$50,000,001 - $100,000,000	23	8	31
$20,000,001 - $50,000,000	23	28	51
$10,000,001 - $20,000,000	15	23	38
$5,000,000 - $10,000,000	9	14	23
Less than $5,000,000	2	19	21
Total	95	95	188

Importance of Reporting on Sustainability

Classification	Mean Score	Did Not Respond	Very Unimportant	Unimportant	Neutral	Important	Very Important	Total
Urban	4.15	-	1	2	4	30	22	59
Rural	3.69	2	1	-	8	16	9	36
Total	4.10	2	2	2	12	46	31	95

Importance of Key Leadership Support

Classification	Did Not Respond	Very Unimportant	Unimportant	Neutral	Important	Very Important	Total
Urban	-	-	1	2	23	33	59
Rural	2	2	-	3	13	16	36
Total	2	2	1	5	36	49	95

Level Key Leadership Support Needs to Originate

Level	Number	%	Environmental	Social	Economic	Integrated
Mayor	33	13.41	27	29	26	22
Councillors	46	18.70	38	41	34	28
General Manager/CEO	67	27.24	56	60	55	46
Departmental Heads	28	11.38	24	24	23	19
CFO	23	9.35	17	21	18	14
State Government	28	11.38	24	25	23	21
Federal Government	20	8.13	17	19	16	15
Other	1	4.10	1	-	-	-
Total	246	100	78	86	80	66

Reasons in Restricting/Preventing Sustainability Reporting

Reasons	Did Not Respond	Very Insignificant	Insignificant	Neutral	Significant	Very Significant	Total
Lack of Inter-Departmental Cooperation	13	7	11	32	31	1	95
Lack of Expertise and Knowledge	9	6	10	25	40	5	95
Lack of Funding	11	6	6	20	37	15	95
Data Inadequacy	7	4	7	14	48	15	95
Lack of Infrastructure	12	6	13	33	29	2	95
Lack of Community Interest	11	5	15	38	24	2	95
Lack of Support from Senior Management	10	10	23	31	20	1	95
Lack of Support from Councilors	11	7	25	35	15	2	95
Not addressed in the strategic plan	15	11	20	37	11	1	95
More important Financial Allocations	11	6	10	23	34	11	95
More important day-to-day issues	10	5	7	26	32	15	95

Importance of Stakeholder Engagement

Classification	Did Not Respond	Very Unimportant	Unimportant	Neutral	Important	Very Important	Total
Urban	-	-	2	10	31	16	59
Rural	1	-	1	4	22	8	36
Significant Growth	-	-	-	-	*1*	-	*1*
Agricultural	-	-	-	*1*	*16*	*5*	*22*
Remote	-	-	*1*	*3*	*5*	*3*	*12*

Importance of Stakeholder Groups

Stakeholder Groups	Did Not Respond	Very Unimportant	Unimportant	Neutral	Important	Very Important	Total
Residents	1	-	2	7	60	25	95
Taxpayers	17	3	9	24	30	12	95
Employers	15	-	3	20	45	12	95
Businesses	9	-	2	17	53	14	95
Community Interest Groups	3	-	2	8	62	20	95
Suppliers	21	1	6	33	31	3	95

Why are Accountants Used in the Sustainability Reporting Process

Why accountants are used	Did Not Respond	Very Unimportant	Unimportant	Neutral	Important	Very Important	Total
Necessary Analytical Skills	3	-	-	4	35	7	49
Necessary Reporting Expertise	3	-	1	7	30	8	49
Necessary Planning & Development Skills	4	1	2	17	21	4	49
Assess Financial Viability	1	-	-	4	26	18	49
Manage the Budgetary Process	1	-	1	2	32	13	49
Extension of Financial Reporting	5	-	1	7	26	10	49
No-one Else Available	12	7	3	12	10	5	49

Role of Accountants in the Sustainability Reporting Process

Role of Accountants	Did Not Respond	Not Involved	Uninvolved	Neutral	Involved	Very Involved	Total
Sustainability Report Preparer	3	4	3	8	26	5	49
Key Decision-Maker	4	4	2	16	17	6	49
Advisory Role	4	1	-	3	35	6	49
Bookkeeping Role	4	2	4	5	27	7	49
Monitoring Role	5	1	2	11	26	4	49
Assists in Financial Costings	4	-	-	1	30	14	49
Part of Reporting Team	7	2	1	17	17	5	49
Financial Information Provider	3	-	-	1	26	19	49

Why Use The GRI/PASS Guidelines?

Why Use the GRI/PASS?	Did Not Respond	Very Insignificant	Insignificant	Neutral	Significant	Very Significant	Total
International Best Practice	1	-	-	1	3	3	8
Consistent and Comparable	1	-	-	-	4	3	8
Well Regarded	2	-	-	1	4	1	8
Provide Good Information	2	-	-	-	5	1	8
Provide Common-Sense Indicators	2	-	-	2	3	1	8
Provide a basis for Development	1	-	-	1	5	1	8
Not Aware of any other Guidelines	2	-	1	2	2	1	8
Access Additional Funding	2	1	1	-	3	1	8
Other Organizations are Using Them	2	-	-	1	4	1	8

Why Are The GRI/PASS Frameworks Not Used?

Why Not Use the GRI/PASS	Did Not Respond	Very Insignificant	Insignificant	Neutral	Significant	Very Significant	Total
Not Relevant	9	1	1	6	2	1	20
Lack of Resources	4	-	-	3	10	3	20
Lack of Expertise	7	-	2	3	8	-	20
Non-Supportive Culture	9	-	-	6	5	-	20
Not Specific Enough	9	-	3	5	1	2	20
Cost of Preparation	9	-	2	5	4	-	20
Non-Availability of Data	7	-	2	2	8	1	20

Restrictions in using the GRI/PASS Frameworks

Restrictions in using the GRI/PASS	Did Not Respond	Very Insignificant	Insignificant	Neutral	Significant	Very Significant	Total
Are not specific enough	2	-	2	1	2	1	8
Are difficult to apply	2	-	1	-	4	1	8
Are not very useful	2	-	3	1	1	1	8
Too general in information	2	-	3	-	2	1	8
Are too prescriptive	1	-	3	-	3	1	8
Unable to meet the diversity	2	-	2	1	2	1	8
Lack of support from senior management	2	-	3	-	3	-	8

Reporting Element Reasons

Importance of Reporting Elements	Did Not Respond	Very Insignificant	Insignificant	Neutral	Significant	Very Significant	Total
Data is readily available	9	1	1	11	43	30	95
Elements are of high importance to the organization	11	-	-	10	46	28	95
Requested by stakeholders	14	-	6	22	37	16	95
Other organizations are reporting on this information	17	-	8	34	27	9	95
Relates to the organizations focus on sustainability reporting	14	-	1	11	44	25	95

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